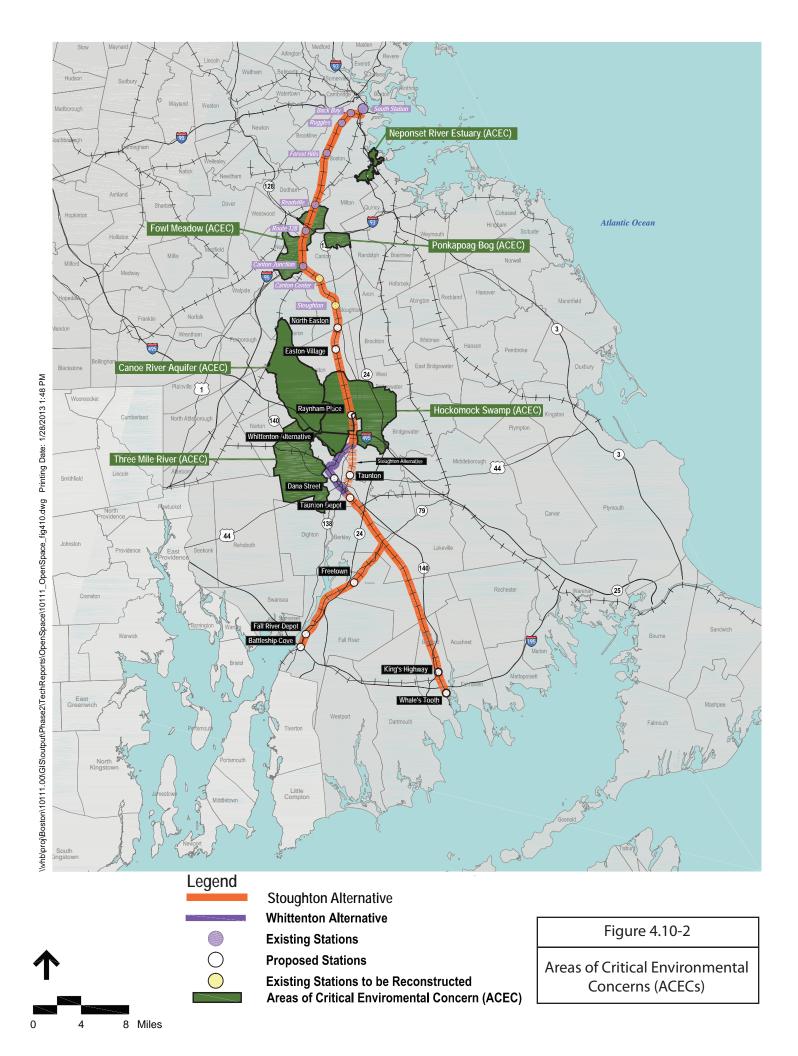


Figure 4.10-1

Major Open Spaces







Area of Critical Environmental Concern (ACEC)

Schools

Protected Open Space

Impacted Protected Open Space

* Traction power stations are only required for electric rail alternative

Proposed Alternative Alignment

Limit of Work for Proposed Station

Traction Power Station*

__ | Limit of Permanent Impact for Proposed Rail

MBTA Commuter Rail Station
MBTA Commuter Rail

- Town Boundaries

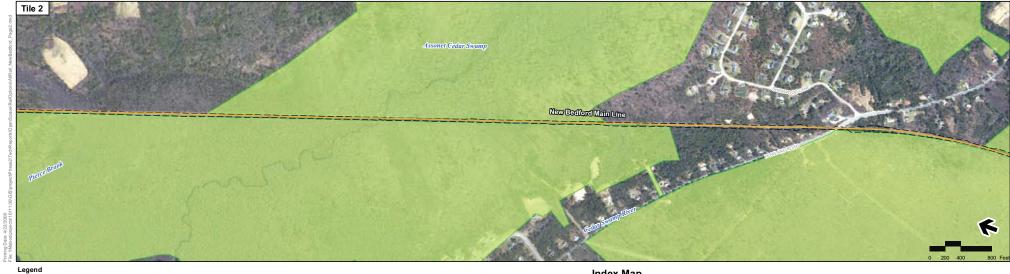
Index Map



Figure 4.10-3a

All Rail Alternatives, New Bedford Main Line: Protected Open Spaces and ACECs



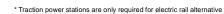


Area of Critical Environmental Concern (ACEC)

Schools

Protected Open Space

Impacted Protected Open Space



Proposed Alternative Alignment

Limit of Permanent Impact for Proposed Rail

Limit of Work for Proposed Station

Traction Power Station*

MBTA Commuter Rail Station

----- MBTA Commuter Rail

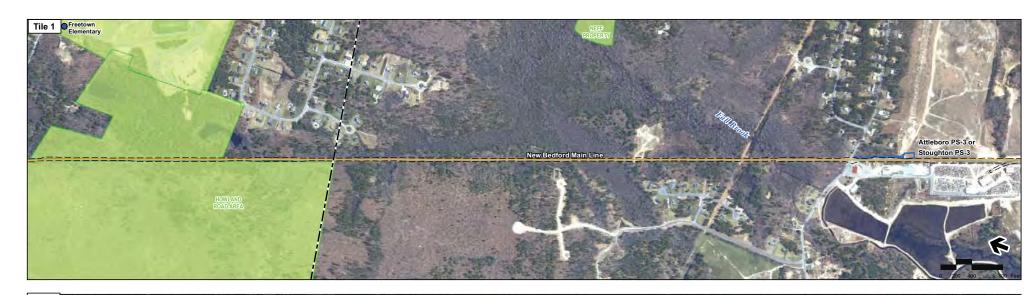
- Town Boundaries

Index Map



Figure 4.10-3b

All Rail Alternatives, New Bedford Main Line: Protected Open Spaces and ACECs





Legend

MBTA Commuter Rail Station

MBTA Commuter Rail

- Town Boundaries

Proposed Alternative Alignment
Limit of Work for Proposed Station

___Limit of Work for Proposed Station
_____ Limit of Permanent Impact for Proposed Rail
_____ Traction Power Station*

Area of Critical Environmental Concern (ACEC)

Schools

Protected Open Space

Impacted Protected Open Space





Figure 4.10-3c

All Rail Alternatives, New Bedford Main Line: Protected Open Spaces and ACECs

^{*} Traction power stations are only required for electric rail alternative





MBTA Commuter Rail Station

----- MBTA Commuter Rail

- Town Boundaries

Proposed Alternative Alignment

Limit of Work for Proposed Station

J Limit of Permanent Impact for Proposed Rail Traction Power Station*

Area of Critical Environmental Concern (ACEC) Schools

Protected Open Space

Index Map



Figure 4.10-3d

All Rail Alternatives, New Bedford Main Line: Protected Open Spaces and ACECs

Impacted Protected Open Space

^{*} Traction power stations are only required for electric rail alternative





Area of Critical Environmental Concern (ACEC)

Protected Open Space

Impacted Protected Open Space

Schools

* Traction power stations are only required for electric rail alternative

Proposed Alternative Alignment

Limit of Permanent Impact for Proposed Rail

Limit of Work for Proposed Station

Traction Power Station*

MBTA Commuter Rail Station

----- MBTA Commuter Rail

- Town Boundaries

Index Map



Figure 4.10-4a

All Rail Alternatives, Fall River Secondary: Protected Open Spaces and ACECs





MBTA Commuter Rail Station ----- MBTA Commuter Rail

- Town Boundaries

Proposed Alternative Alignment

Limit of Work for Proposed Station Limit of Permanent Impact for Proposed Rail Traction Power Station*

Area of Critical Environmental Concern (ACEC) Schools

Protected Open Space

Impacted Protected Open Space





Figure 4.10-4b

All Rail Alternatives, Fall River Secondary: Protected Open Spaces and ACECs

^{*} Traction power stations are only required for electric rail alternative





- Town Boundaries

Proposed Alternative Alignment
Limit of Work for Proposed Station
Limit of Permanent Impact for Proposed Rail
Traction Power Station*

Impacted Protected Open Space

Index Map

Figure 4.10-4c

All Rail Alternatives, Fall River Secondary: Protected Open Spaces and ACECs

Area of Critical Environmental Concern (ACEC)

Schools

Protected Open Space

^{*} Traction power stations are only required for electric rail alternative





Area of Critical Environmental Concern (ACEC)

Schools

* Traction power stations are only required for electric rail alternative

Proposed Alternative Alignment

Limit of Permanent Impact for Proposed Rail

Limit of Work for Proposed Station

O MBTA Commuter Rail Station

- Town Boundaries



Figure 4.10-5a

Stoughton Alternatives Stoughton Line



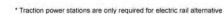


Area of Critical Environmental Concern (ACEC)

Schools

Protected Open Space

Impacted Protected Open Space



Proposed Alternative Alignment

Limit of Permanent Impact for Proposed Rail

Limit of Work for Proposed Station

Traction Power Station*

MBTA Commuter Rail Station

MBTA Commuter Rail

- Town Boundaries

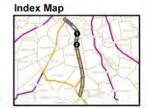
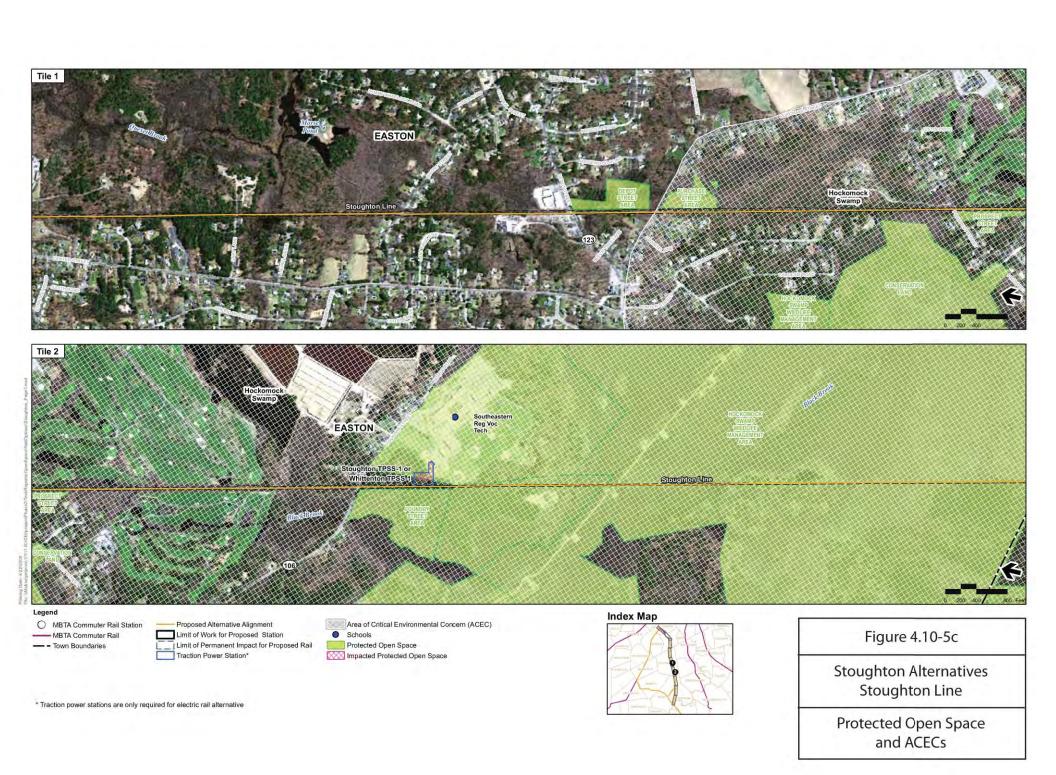


Figure 4.10-5b

Stoughton Alternatives Stoughton Line







Legend

MBTA Commuter Rail Station
 MBTA Commuter Rail

- Town Boundaries

Proposed Alternative Alignment
Limit of Work for Proposed Station

Limit of Work for Proposed Station

J Limit of Permanent Impact for Proposed Rail

Traction Power Station*

Area of Critical Environmental Concern (ACEC)

Schools

Protected Open Space
Impacted Protected Open Space





Figure 4.10-5d

Stoughton Alternatives Stoughton Line

^{*} Traction power stations are only required for electric rail alternative





- Town Boundaries



Area of Critical Environmental Concern (ACEC)

Schools





Figure 4.10-5e

Stoughton Alternatives Stoughton Line

Protected Open Space
Impacted Protected Open Space

^{*} Traction power stations are only required for electric rail alternative





Area of Critical Environmental Concern (ACEC)

Schools

Protected Open Space
Impacted Protected Open Space

* Traction power stations are only required for electric rail alternative

Proposed Alternative Alignment

Limit of Permanent Impact for Proposed Rail
Traction Power Station*

Limit of Work for Proposed Station

MBTA Commuter Rail Station

- Town Boundaries

Figure 4.10-6a

Whittenton Alternatives Whittenton Branch





MBTA Commuter Rail Station

MBTA Commuter Rail

- Town Boundaries

Proposed Alternative Alignment
Limit of Work for Proposed Station
Limit of Permanent Impact for Proposed Rail
Traction Power Station*

Area of Critical Environmental Concern (ACEC)

Schools



Figure 4.10-6b

Whittenton Alternatives Whittenton Branch

^{*} Traction power stations are only required for electric rail alternative





----- Limit of Disturbance

South Coast Rail

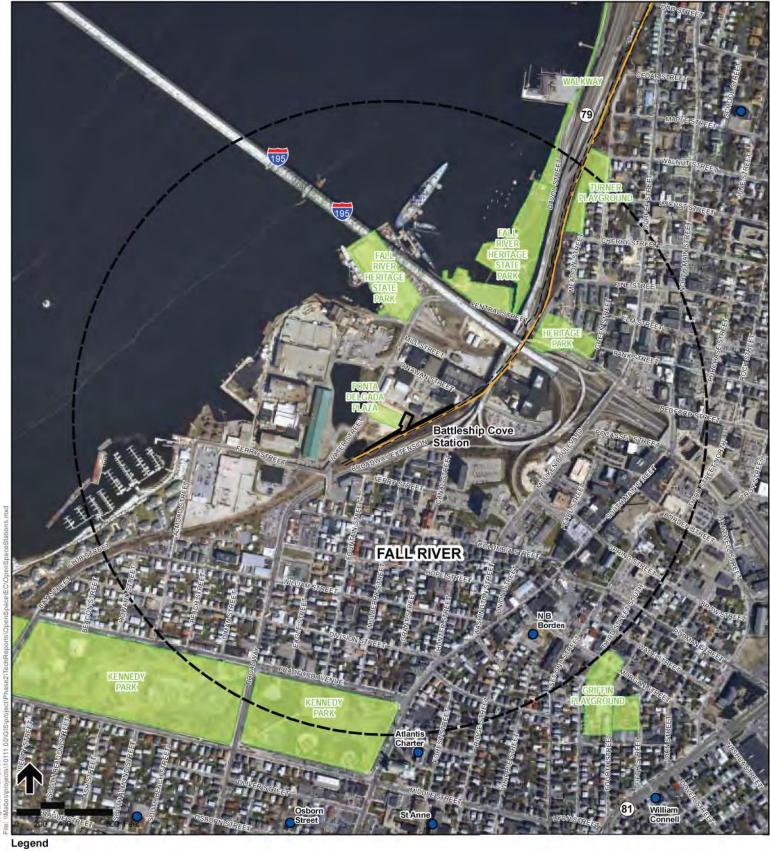
Proposed Station

Proposed Station Platform

Traction Power Station

Figure 4.10-7

Property Acquisition at Stoughton Memorial Conservation Land



Proposed Alternative
Limit of Permanent Impact for Proposed Alternative

Half-mile Radius of Proposed Stations

Limit of Work for Proposed Station

School

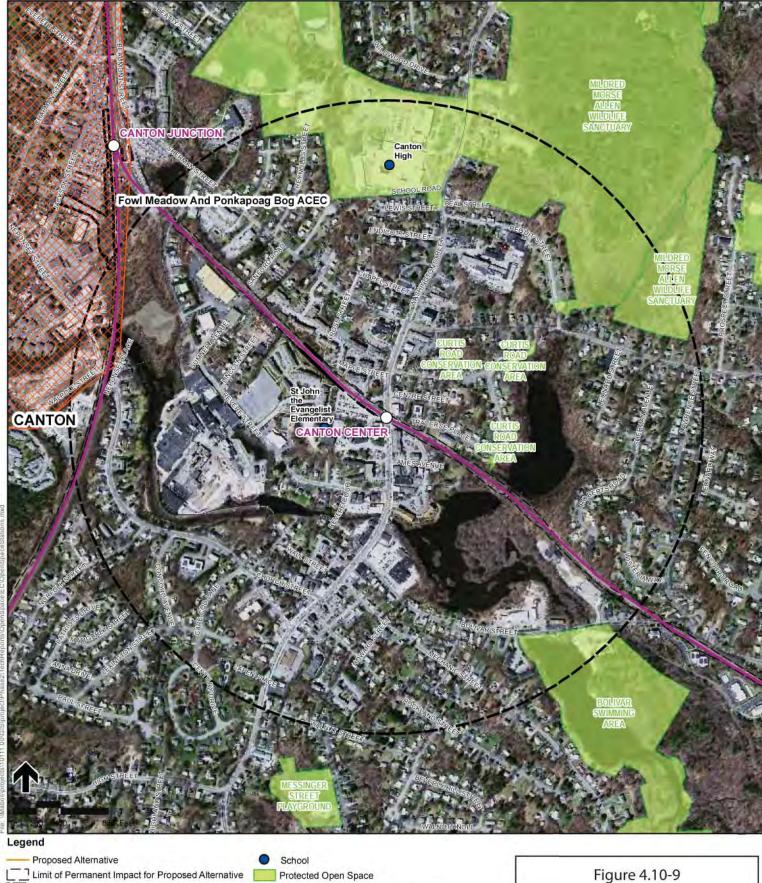
Protected Open Space

Area of Critical Environmental Concern

Impacted Protected Open Space

Figure 4.10-8

Battleship Cove Station



___ Limit of Permanent Impact for Proposed Alternative Half-mile Radius of Proposed Stations

Limit of Work for Proposed Station

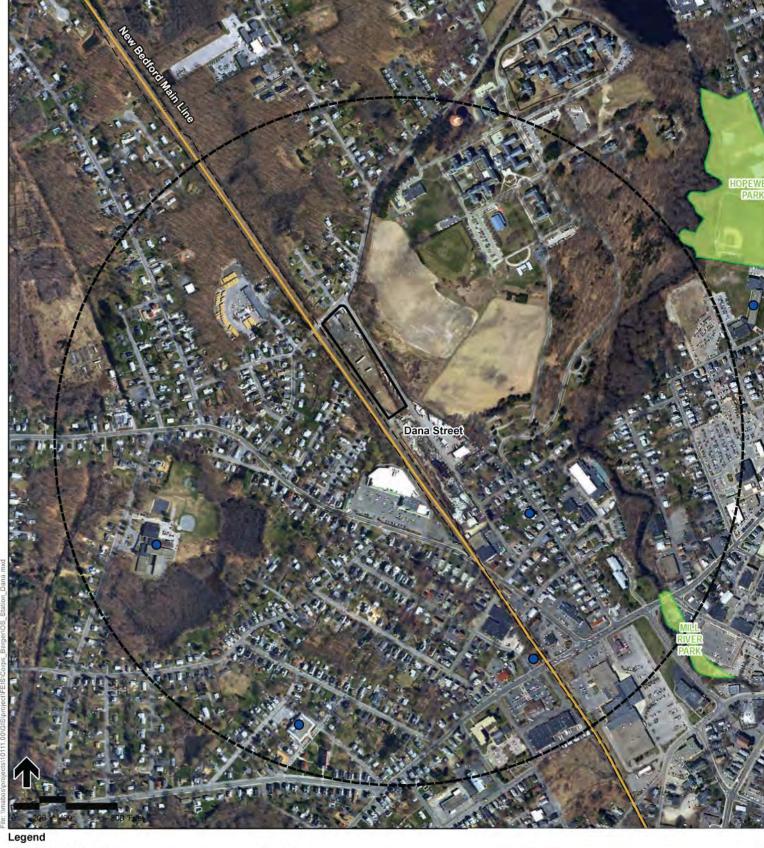
O MBTA Commuter Rail Station

---- MBTA Commuter Rail

Area of Critical Environmental Concern

Impacted Protected Open Space

Canton Center Station



Proposed Alternative
Limit of Permanent Impact for Proposed Alternative
Half-mile Radius of Proposed Stations
Limit of Work for Proposed Station

School

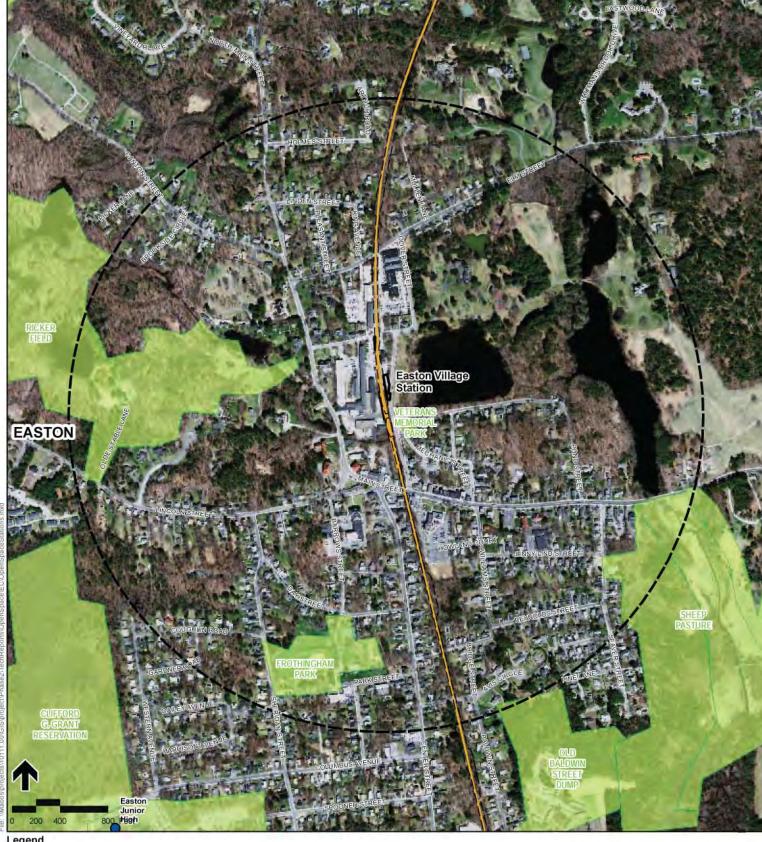
Protected Open Space

Area of Critical Environmental Concern

Impacted Protected Open Space

Figure 4.10-10

Dana Street Station



Proposed Alternative

____ Limit of Permanent Impact for Proposed Alternative

Half-mile Radius of Proposed Stations Limit of Work for Proposed Station

School

Protected Open Space

Area of Critical Environmental Concern

Impacted Protected Open Space

Figure 4.10-11

Easton Village Station



Limit of Permanent Impact for Proposed Alternative
Half-mile Radius of Proposed Stations

Limit of Work for Proposed Station

School

Protected Open Space

Area of Critical Environmental Concern

Impacted Protected Open Space

Figure 4.10-12

Fall River Depot Station



Limit of Permanent Impact for Proposed Alternative

Half-mile Radius of Proposed Stations
Limit of Work for Proposed Station

School

Protected Open Space

Area of Critical Environmental Concern

Impacted Protected Open Space

Figure 4.10-13

Freetown Station



Limit of Permanent Impact for Proposed Alternative

Half-mile Radius of Proposed Stations

Limit of Work for Proposed Station

School

Protected Open Space

Area of Critical Environmental Concern

Impacted Protected Open Space

Figure 4.10-14

King's Highway Station



Proposed Alternative
Limit of Permanent Impact for Proposed Alternative
Half-mile Radius of Proposed Stations
Limit of Work for Proposed Station



School

Protected Open Space

Area of Critical Environmental Concern

Impacted Protected Open Space

Figure 4.10-15

North Easton Station



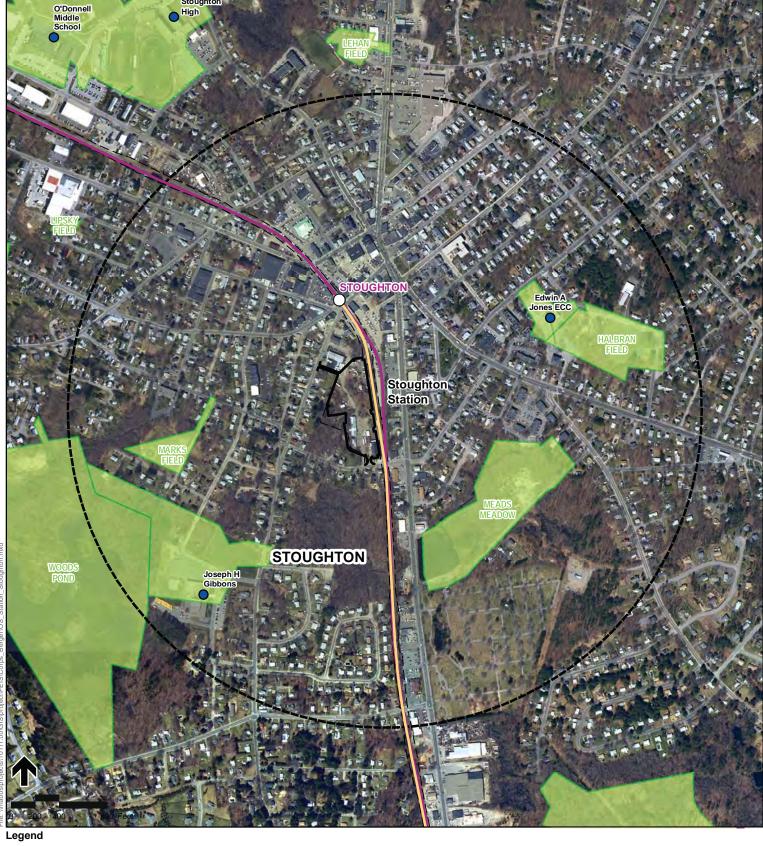
____ Limit of Permanent Impact for Proposed Alternative Half-mile Radius of Proposed Stations Limit of Work for Proposed Station

Area of Critical Environmental Concern

Impacted Protected Open Space

Figure 4.10-16

Raynham Park Station



---- Proposed Alternative

Limit of Permanent Impact for Proposed Alternative
Half-mile Radius of Proposed Stations

Limit of Work for Proposed Station

MBTA Commuter Rail Station

MBTA Commuter Rail

School

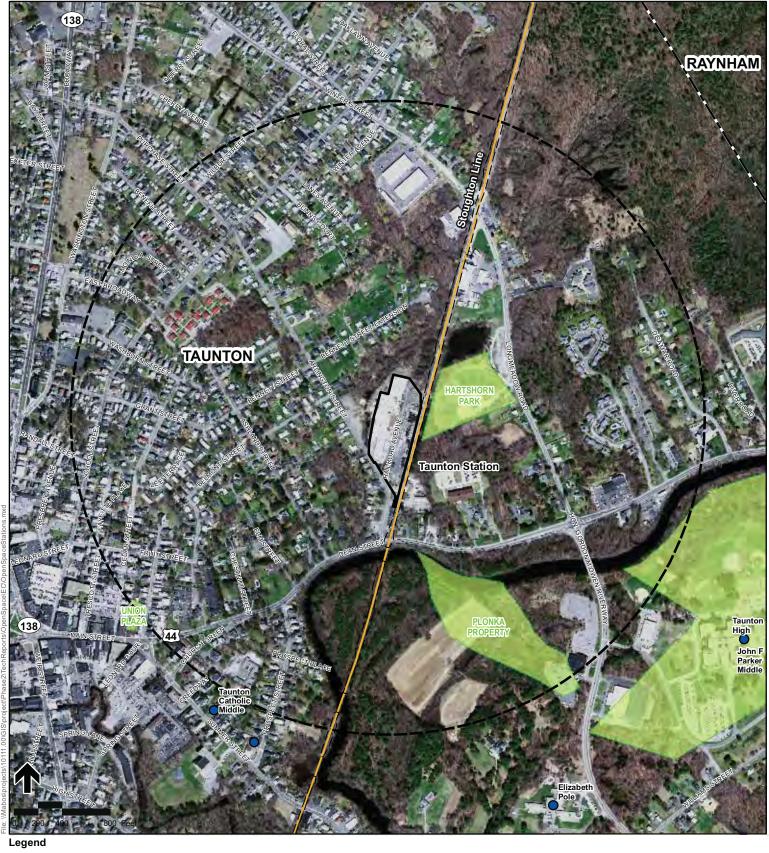
Protected Open Space

Area of Critical Environmental Concern

Impacted Protected Open Space

Figure 4.10-17

Stoughton Station



Proposed Alternative
Limit of Permanent Impact for Proposed Alternative
Half-mile Radius of Proposed Stations
Limit of Work for Proposed Station

School

Protected Open Space

Area of Critical Environmental Concern
Impacted Protected Open Space

Figure 4.10-18

Taunton Station



Limit of Permanent Impact for Proposed Alternative
Half-mile Radius of Proposed Stations

Limit of Work for Proposed Station

School

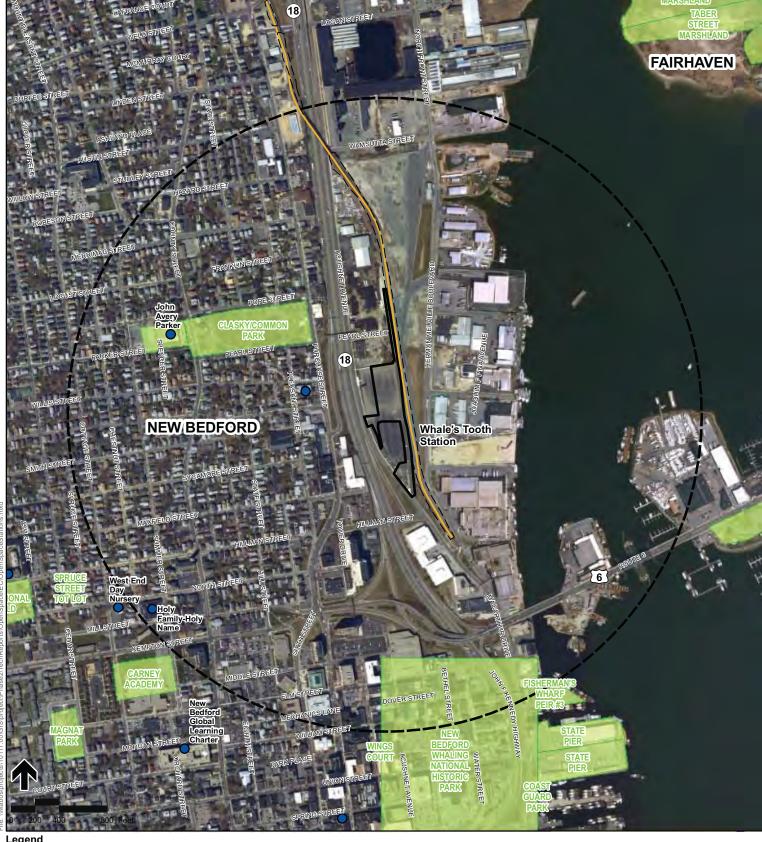
Protected Open Space

Area of Critical Environmental Concern

Impacted Protected Open Space

Figure 4.10-19

Taunton Depot Station



Proposed Alternative

Limit of Permanent Impact for Proposed Alternative Half-mile Radius of Proposed Stations

Limit of Work for Proposed Station

School

Protected Open Space

Area of Critical Environmental Concern

Impacted Protected Open Space

Figure 4.10-20

Whale's Tooth Station



Proposed Alternative

Limit of Permanent Impact for Proposed Rail
Half-mile Radius of Proposed Layover Site
Limit of Work for Proposed Layover Facility

School

Protected Open Space

Area of Critical Environmental Concern

Impacted Protected Open Space

Figure 4.10-21

Layover Facility at Wamsutta Site



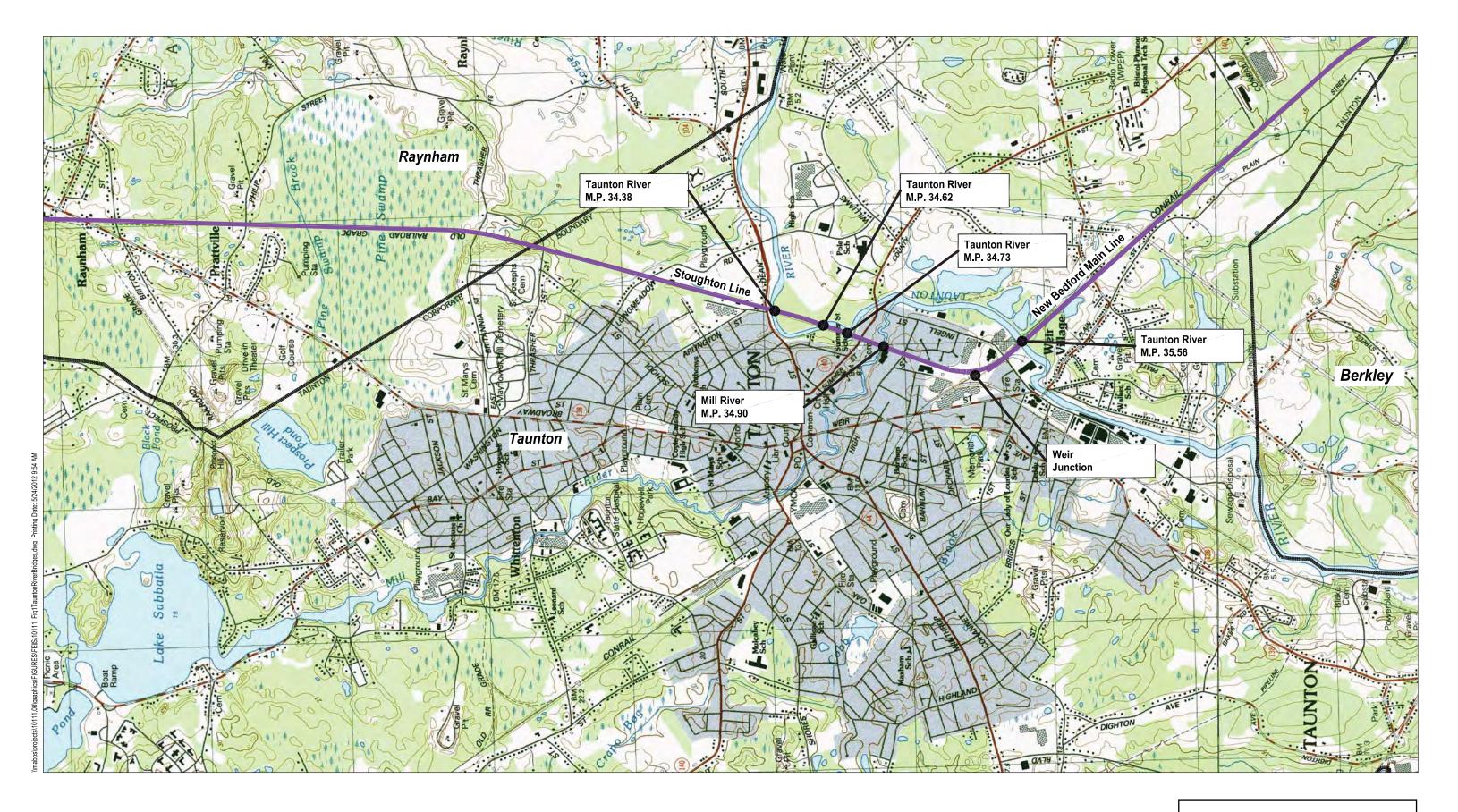
Proposed Alternative TLimit of Permanent Impact for Proposed Rail Half-mile Radius of Proposed Layover Site Limit of Work for Proposed Layover Facility

School Protected Open Space Area of Critical Environmental Concern

Impacted Protected Open Space

Figure 4.10-22

Layover Facility at Weaver's Cove Site



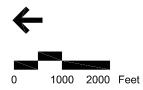
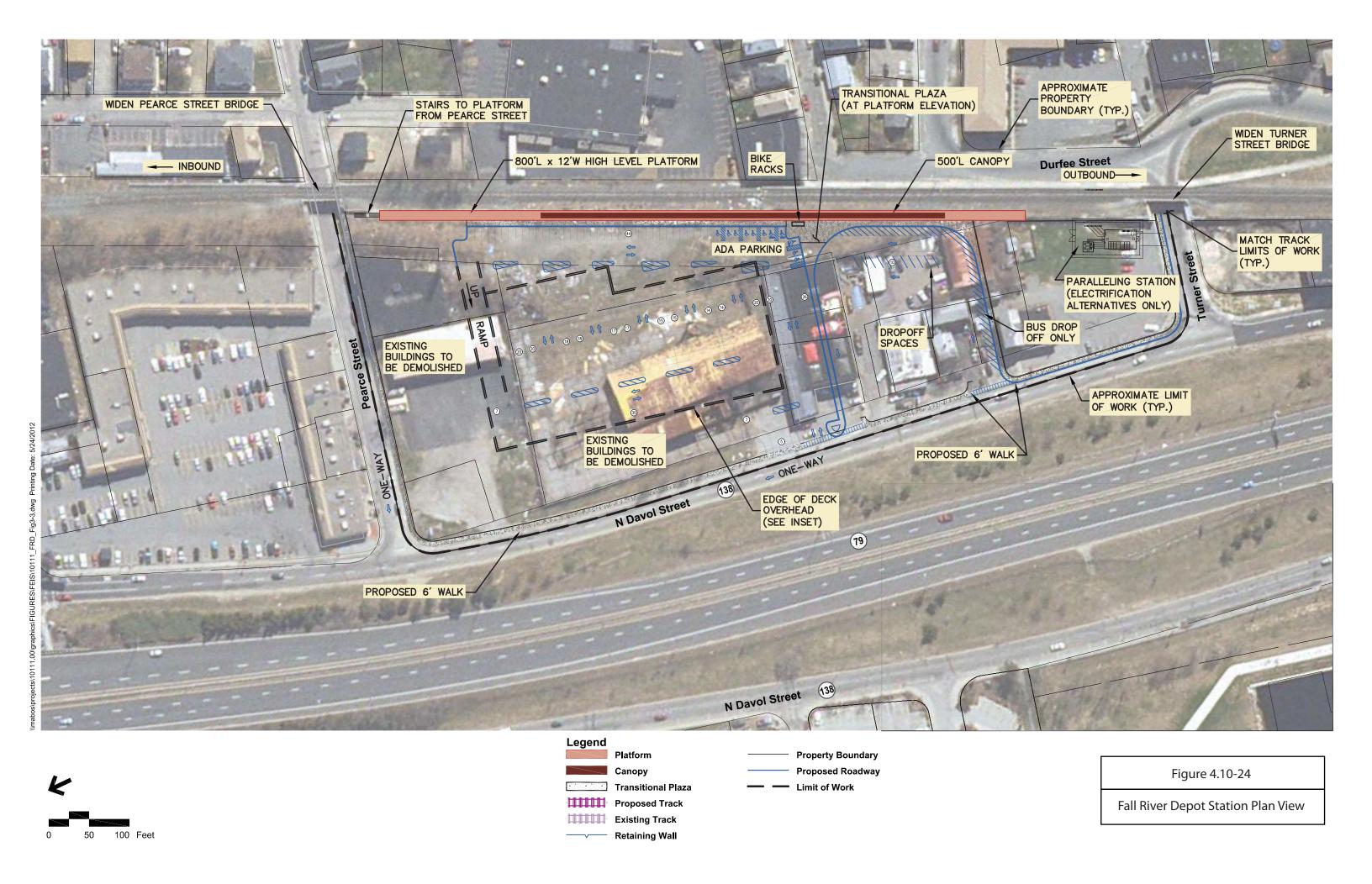


Figure 4.10-23

Taunton and Mill Rivers Bridges





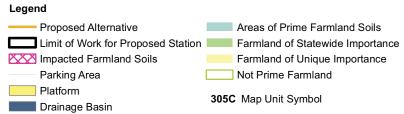
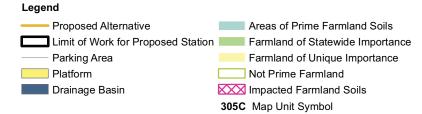




Figure 4.11-1





Taunton Depot Station Site Farmland Soils

Figure 4.11-2



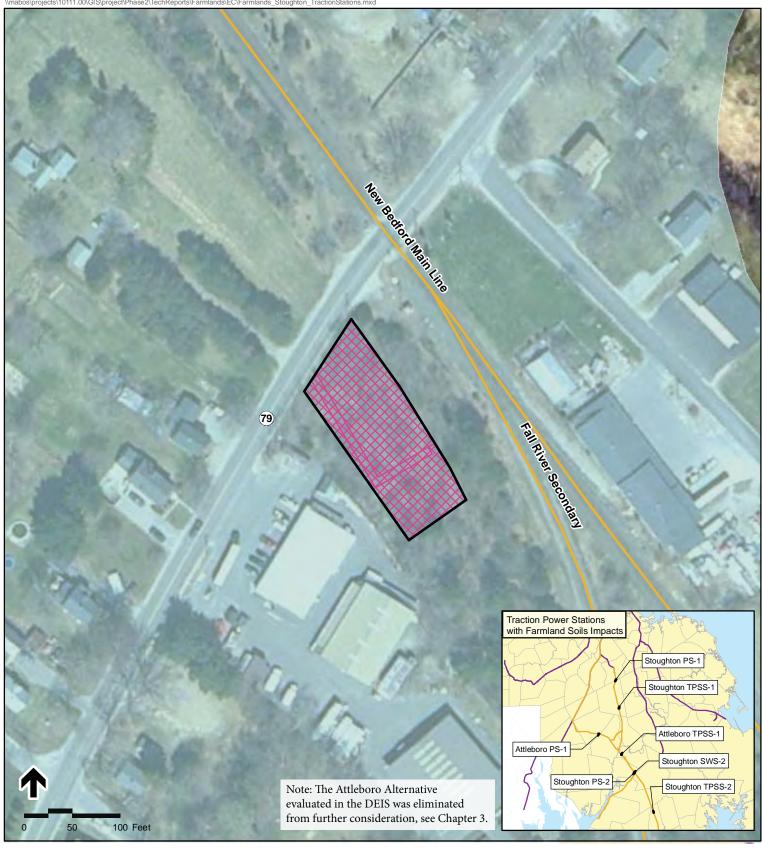
North Easton Station Site Farmland Soils

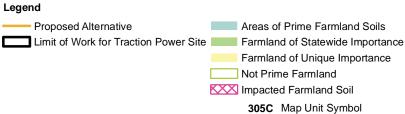






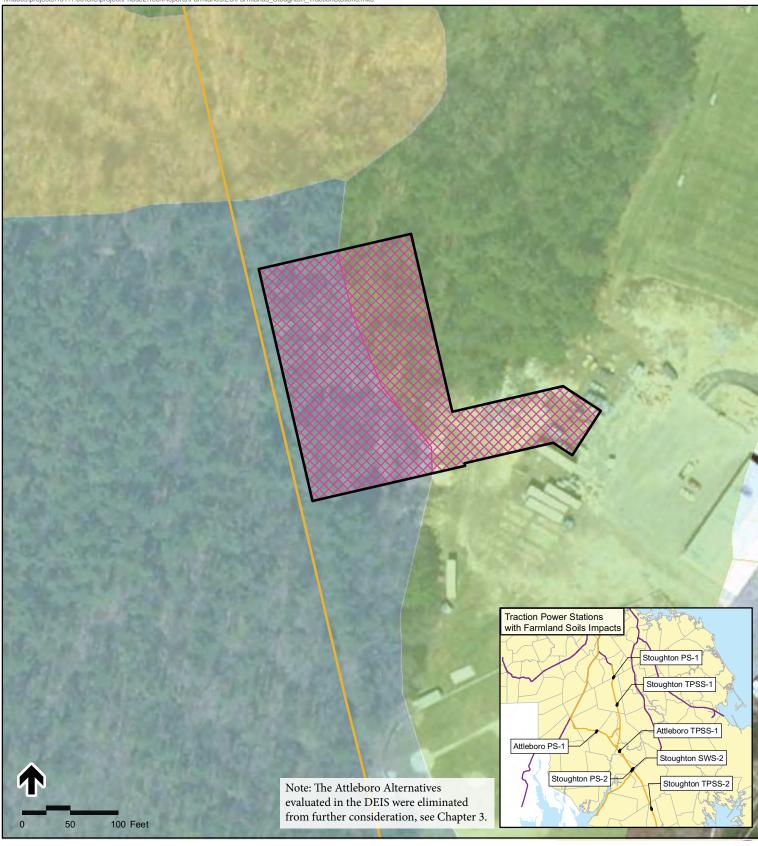
Stoughton PS-1 Traction Power Station Farmland Soils





Stoughton SWS-2 Traction Power Station Farmland Soils

5/6/2009 \mabos\projects\10111.00\GIS\project\Phase2\TechReports\Farmlands\EC\Farmlands_Stoughton_TractionStations.mxd



Legend Areas of Prime Farmland Soils Proposed Alternative Limit of Work for Traction Power Site Farmland of Statewide Importance Farmland of Unique Importance Not Prime Farmland Impacted Farmland Soil 305C Map Unit Symbol

Stoughton TPSS-1 Traction Power Station Farmland Soils



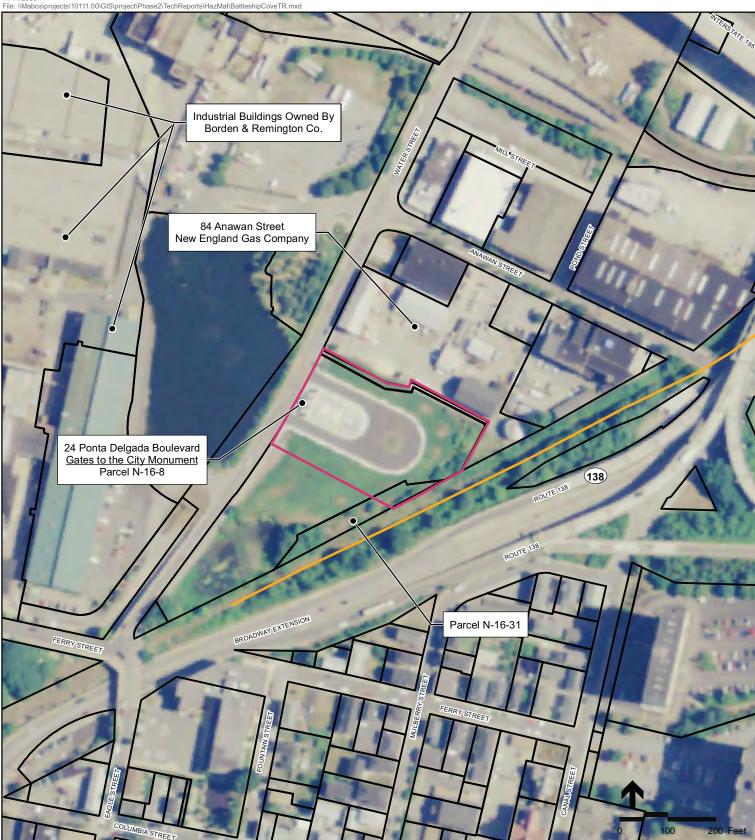


Stoughton TPSS-2 Traction Power Station Farmland Soils

SegmentsProposed AlternativeProposed Location Site

Figure 4.12-1

Site Plan - Whittenton Branch



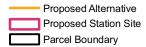


Figure 4.12-2

Site Plan - Battleship Cove Station



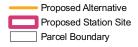
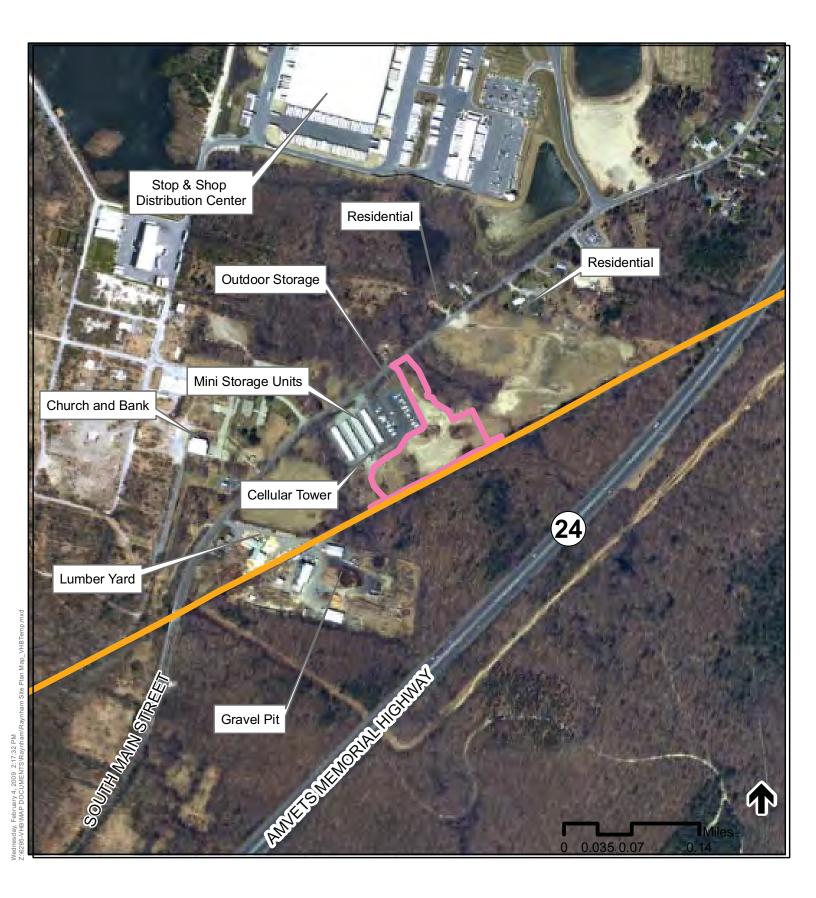


Figure 4.12-3

Site Plan - Fall River Depot Station



Proposed Alternative

Proposed Station Site

Figure 4.12-4

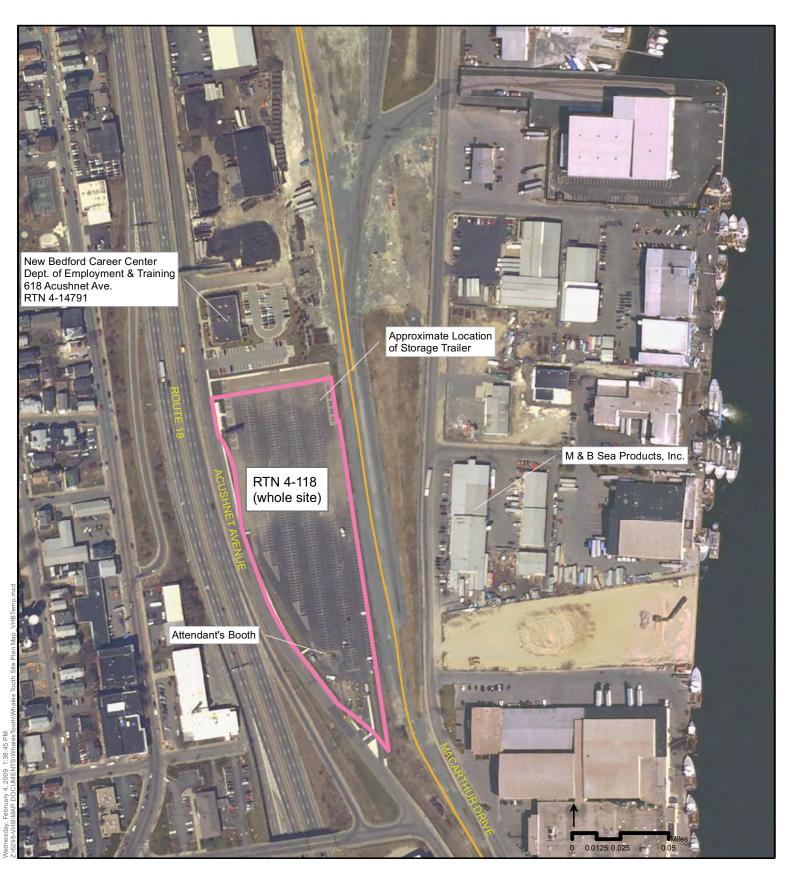
Site Plan - Freetown Station

Proposed Alternative

Limit of Work of Proposed Station

Figure 4.12-5

Site Plan - King's Highway Station





Proposed Alternative

Figure 4.12-6

Site Plan - Whale's Tooth Station





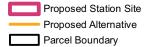
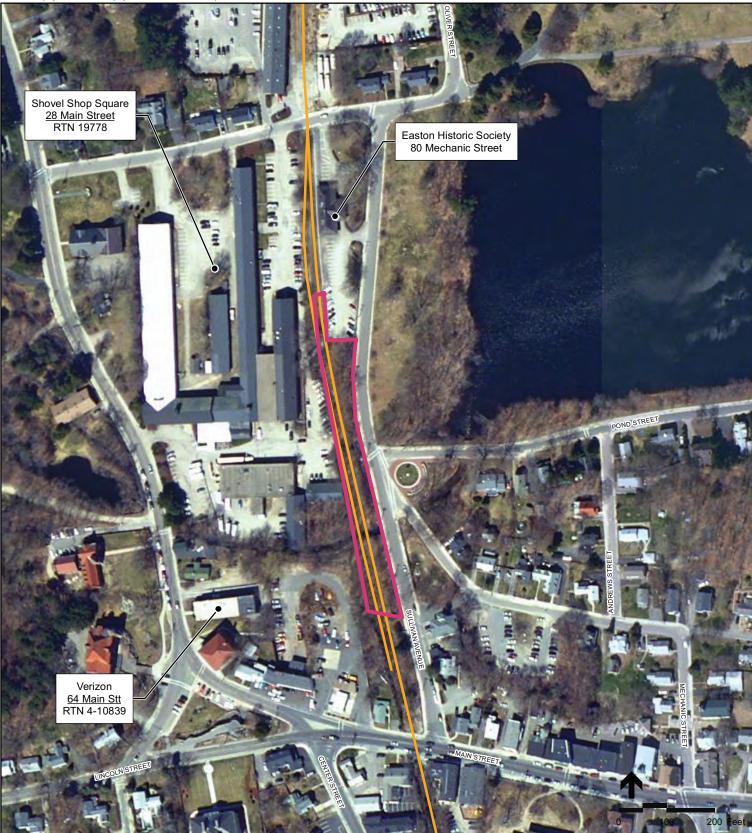


Figure 4.12-7

Site Plan - Taunton Depot Station



Proposed Alternative
Proposed Station Site

Figure 4.12-8

Site Plan - Easton Village Station



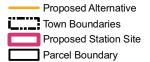


Figure 4.12-9

Site Plan - North Easton Station

Proposed Alternative

Proposed Station Site

Figure 4.12-10

Site Plan - Raynham Place Station



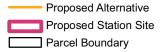
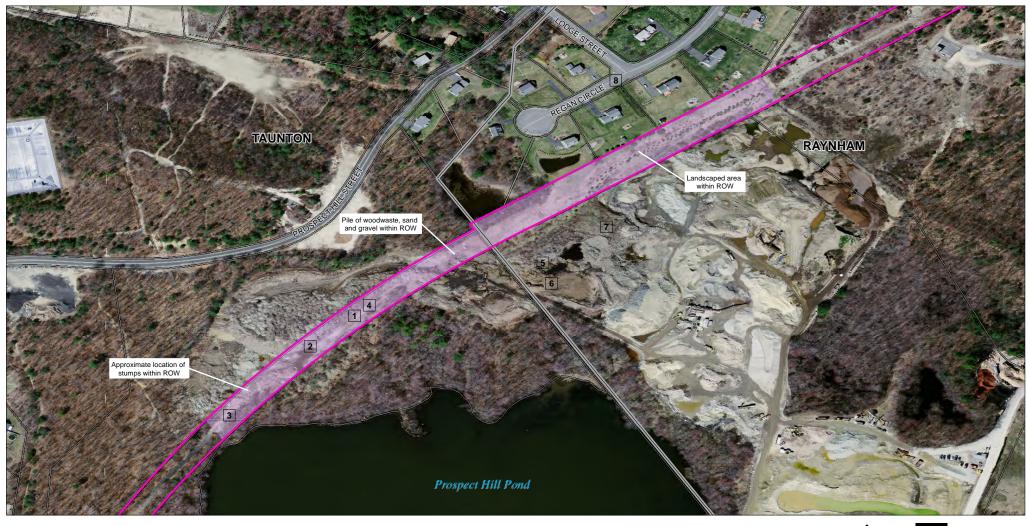


Figure 4.12-11

Site Plan - Taunton Station





Railroad Right-of-Way (ROW)

Altered Portion of ROW

Assessor's Parcels

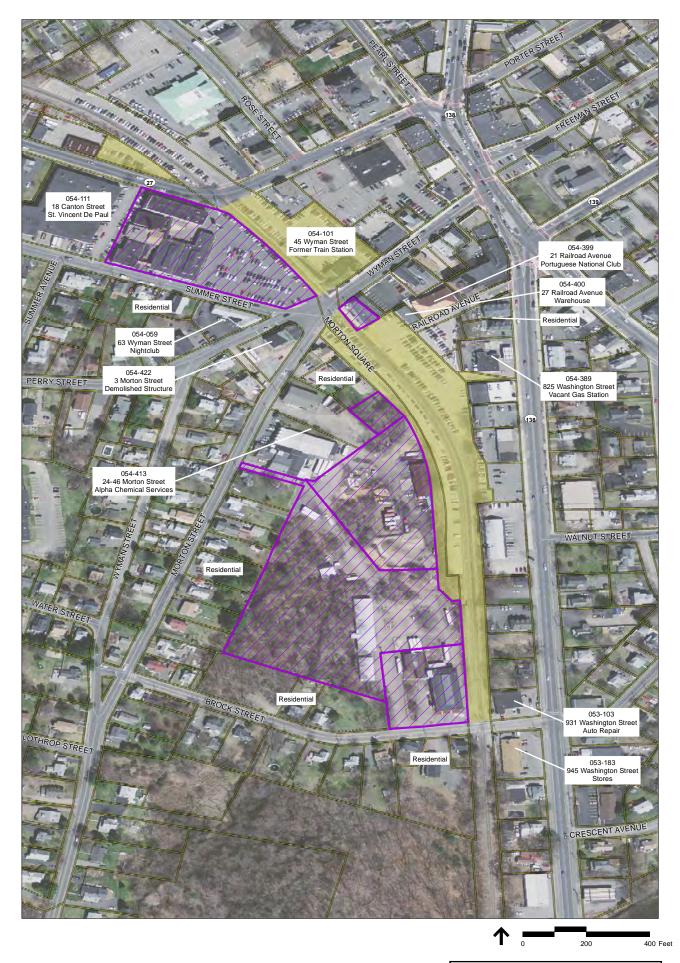
Town Boundary

6 Photograph Location (Approximate)



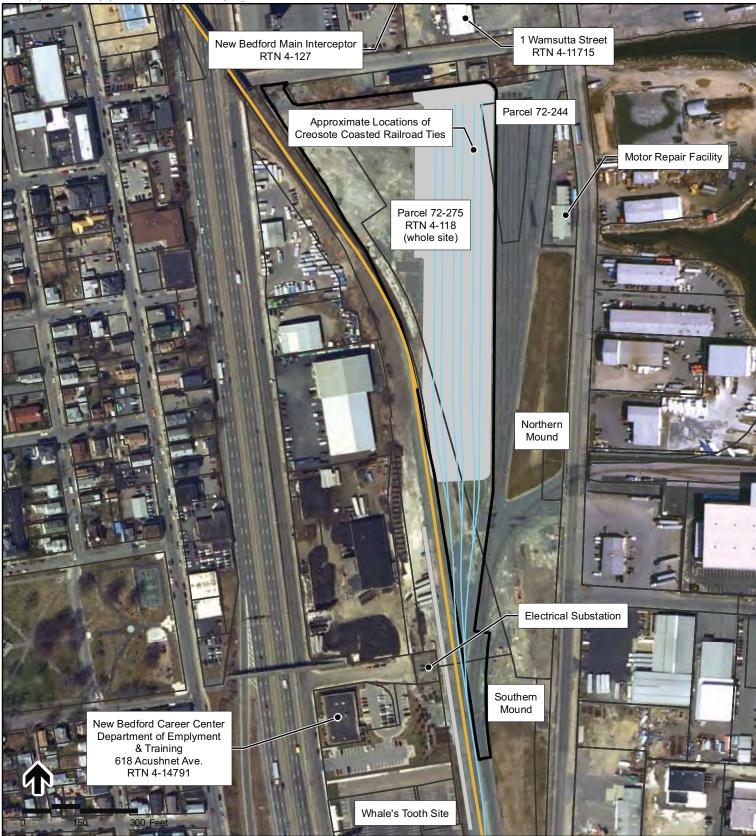
Figure 4.12-12

Railroad Right-of-Way Raynham and Taunton





Stoughton Station MBTA Parcels Included in Station Design



---- Track Centerline

Parcel Boundary

Proposed Alternative

Limit of Permanent Impact for Proposed Layover Facility

Proposed Pavement

Proposed Building

Figure 4.12-14

Site Plan - Wamsutta Layover Site

Proposed Alternative

Proposed Building

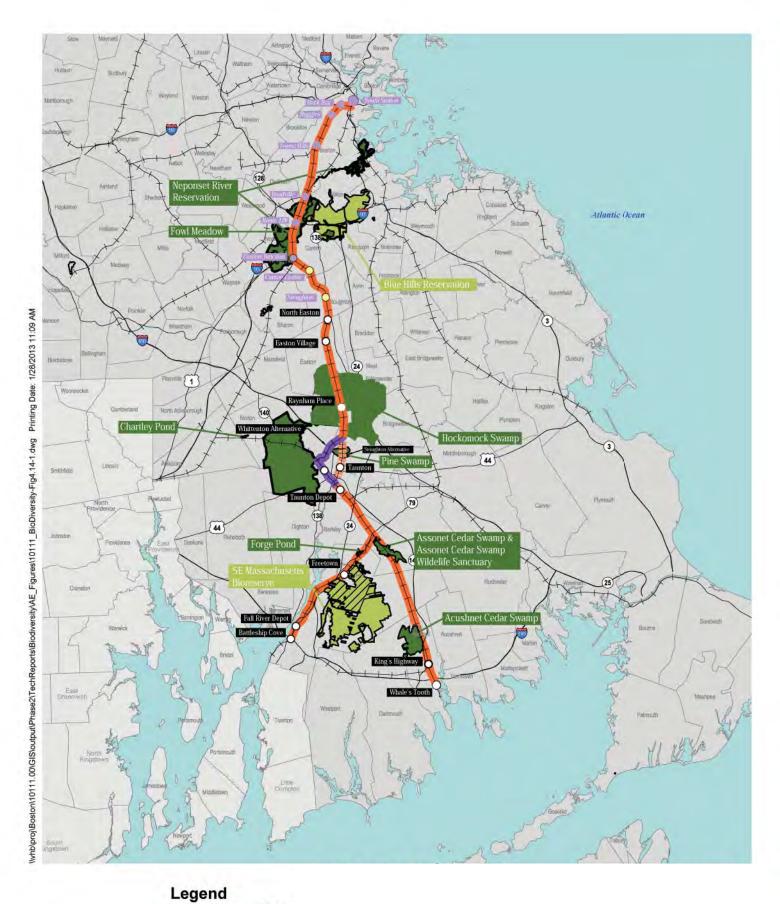
Proposed Edge of Pavement

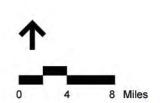
Parcel Boundary

Limit of Permanent Impact for Proposed Layover Facility

Figure 4.12-15

Site Plan - Weaver's Cove East Layover Site





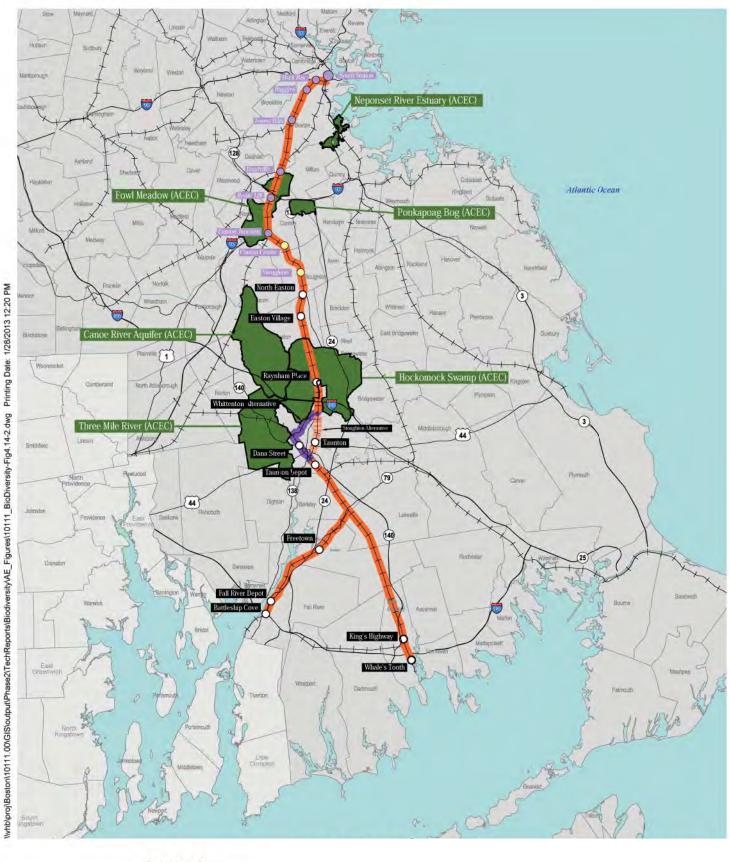
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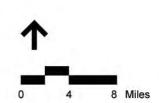
Whittenton Alternative
Existing Stations
Proposed Stations

Existing Stations to be Reconstructed Major Wetland Areas Freetown-Fall River State Forest Major Upland Areas

Figure 4.14-1

Major Wetland and Upland Natural Areas





Whittenton Alternative
Existing Stations
Proposed Stations
Existing Stations to be

Areas of Critical Environmental Concern (ACECs)

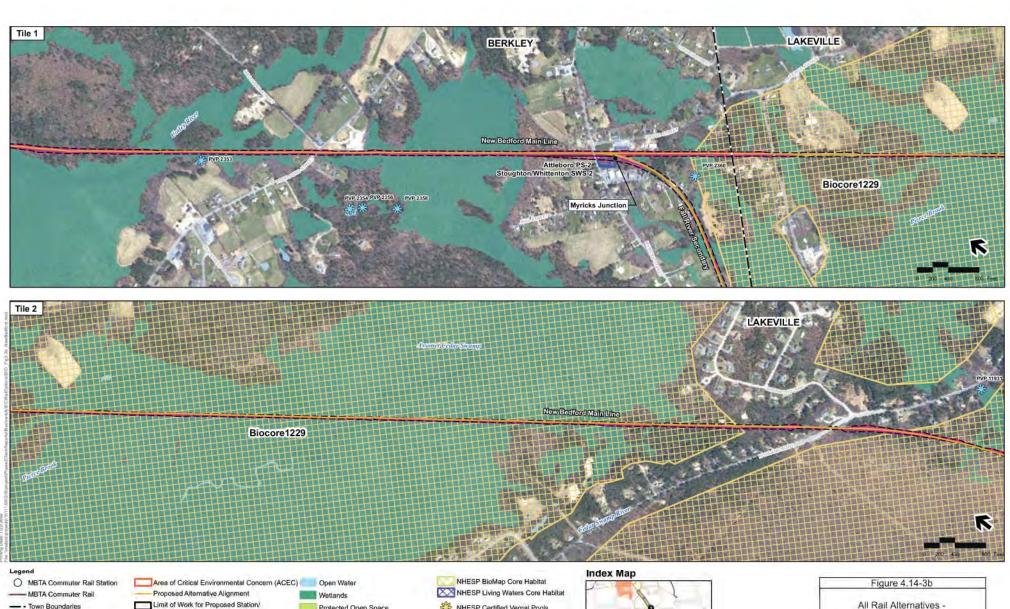
Figure 4.14-2

Existing Stations to be Reconstructed
Areas of Critical Environmental Concern (ACEC)









New Bedford Main Line



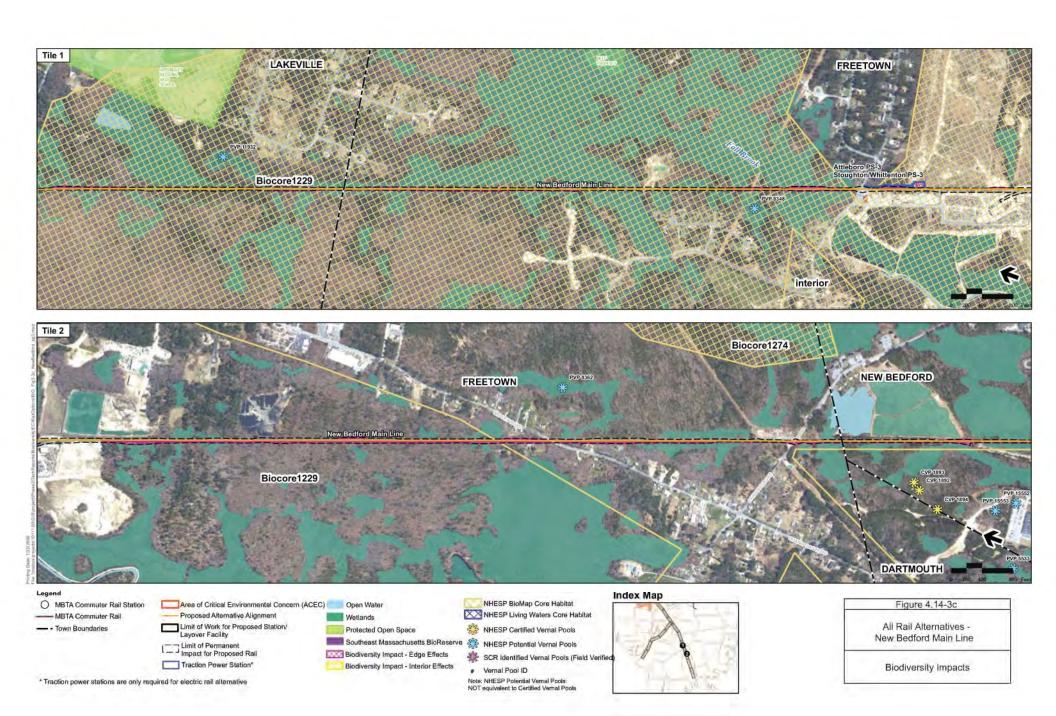








Figure 4.14-3d

All Rail Alternatives -New Bedford Main Line



Figure 4.14-3e

All Rail Alternatives -

New Bedford Main Line



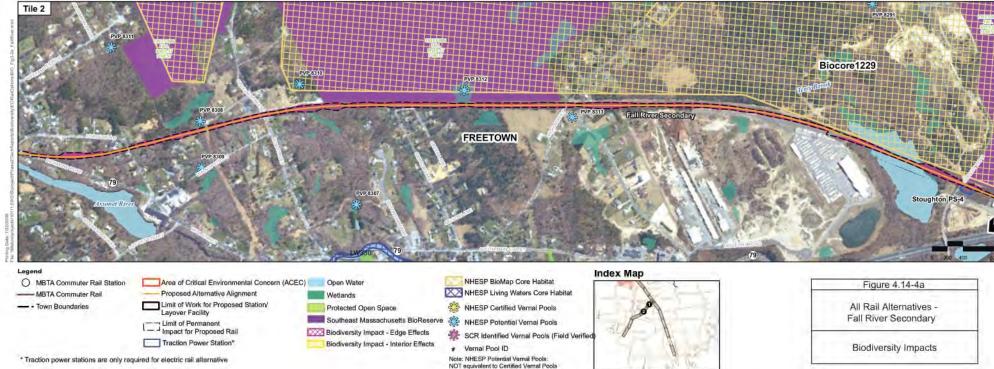










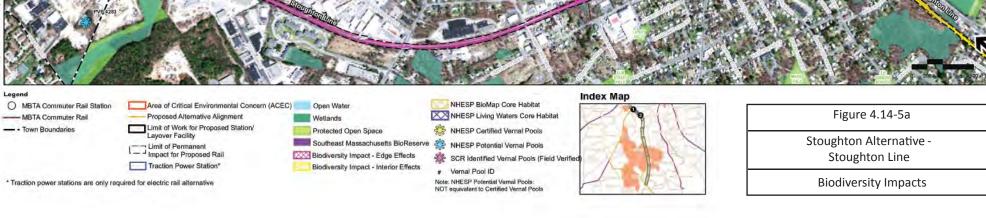


Figure 4.14-4c

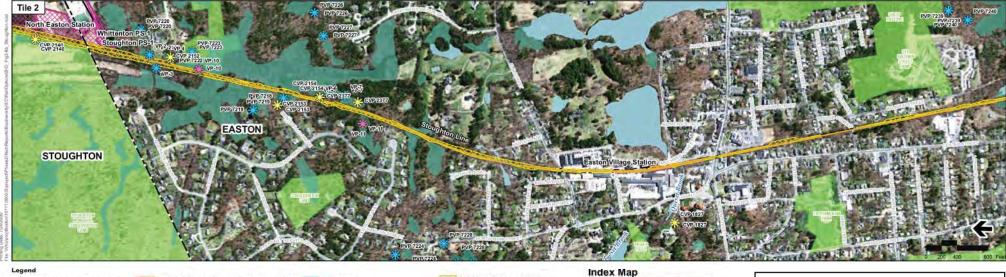
All Rail Alternatives -Fall River Secondary













O MBTA Commuter Rail Station

---- MBTA Commuter Rail

Area of Critical Environmental Concern (ACEC) Open Water

Wetlands

Protected Open Space

Biodiversity Impact - Edge Effects

Biodiversity Impact - Interior Effects

Proposed Alternative Alignment

NHESP BioMap Core Habitat NHESP Living Waters Core Habitat

NHESP Certified Vernal Pools

Southeast Massachusetts BioReserve NHESP Potential Vernal Pools

SCR Identified Vernal Pools (Field Verifie

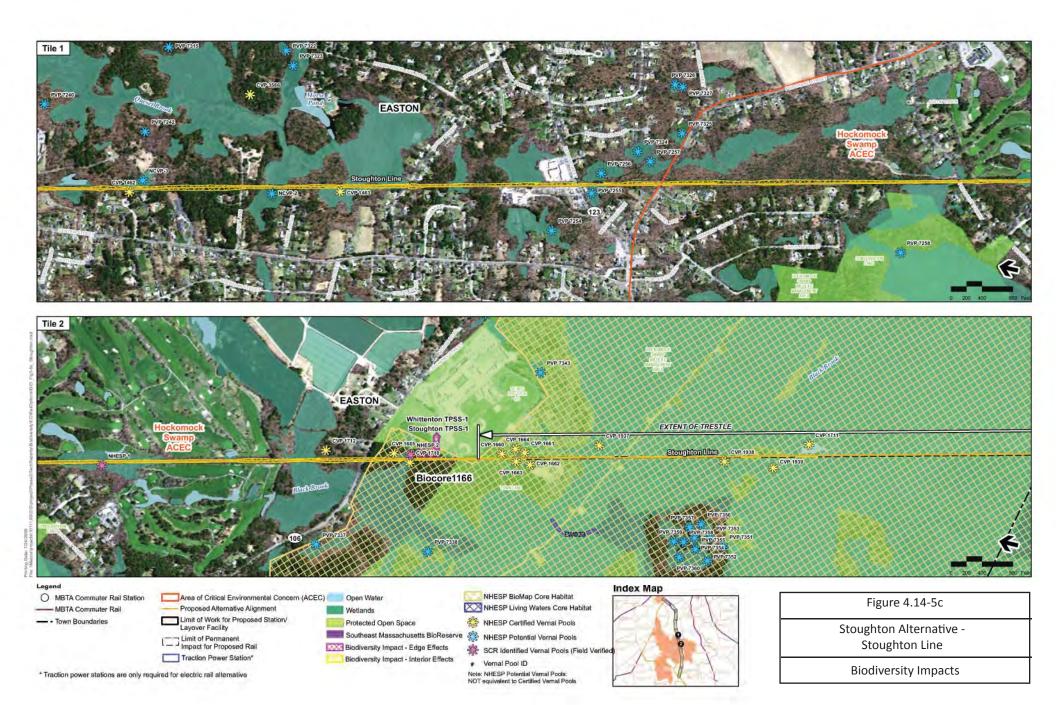
Note: NHESP Potential Vernal Pools: NOT equivalent to Certified Vernal Pools

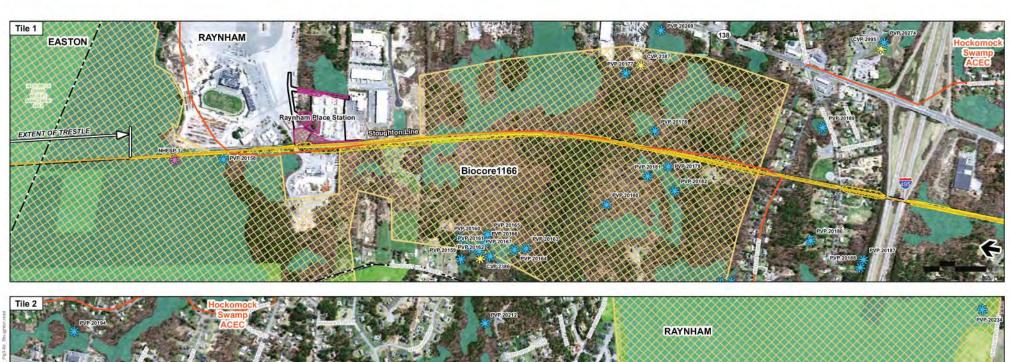


Figure 4.14-5b

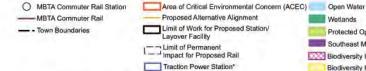
Stoughton Alternative -Stoughton Line

^{*}Traction power stations are only required for electric rail alternative









^{*} Traction power stations are only required for electric rail alternative

NHESP BioMap Core Habitat NHESP Living Waters Core Habitat

Wetlands

Protected Open Space

Biodiversity Impact - Edge Effects

Biodiversity Impact - Interior Effects

NHESP Certified Vernal Pools

Southeast Massachusetts BioReserve 🚜 NHESP Potential Vernal Pools

SCR Identified Vernal Pools (Field Verified

Note: NHESP Potential Vernal Pools NOT equivalent to Certified Vernal Pools



Figure 4.14-5d

Stoughton Alternative -Stoughton Line

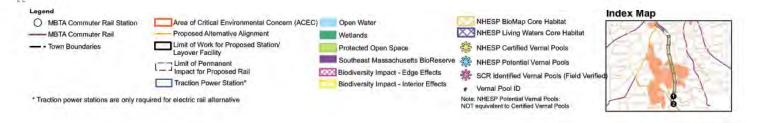


Figure 4.14-5e

Stoughton Alternative Stoughton Line

Biodiversity Impacts





Legend

MBTA Commuter Rail

- Town Boundaries

----- Proposed Alternative

Open Water DEP Wetlands (Modified by VHB 2009) Protected Open Space

Southeast Massachusetts BioReserve

NHESP BioMap Core Habitat

NHESP Living Waters Core Habitat

NHESP Certified Vernal Pools

NHESP Potential Vernal Pools

SCR Identified Vernal Pools (Field Verified)

Vernal Pool ID

Note: NHESP Potential Vernal Pools: NOT equivalent to Certified Vernal Pools

Index Map



Figure 4.14-6a

Stoughton Alternative Whittenton Variation

Biodiversity













Note: NHESP Potential Vernal Pools: NOT equivalent to Certified Vernal Pools



Figure 4.14-6b

Stoughton Alternative Whittenton Variation

Biodiversity





Legend

MBTA Commuter Rail Station

Town Boundaries

Proposed Stations

Wetland Delineation

Wetland Delineation

Wetland Delineation

Town Boundaries

Wetland Delineation

Wetland Delineation

Town Boundaries

Fill to Vernal Pool

Fill to Vernal Pool

NHESP Certified Vernal Pool

NHESP Potential Vernal Pool

NHESP Potential Vernal Pool

Field-verified Vernal Pool

Field-verified Vernal Pool

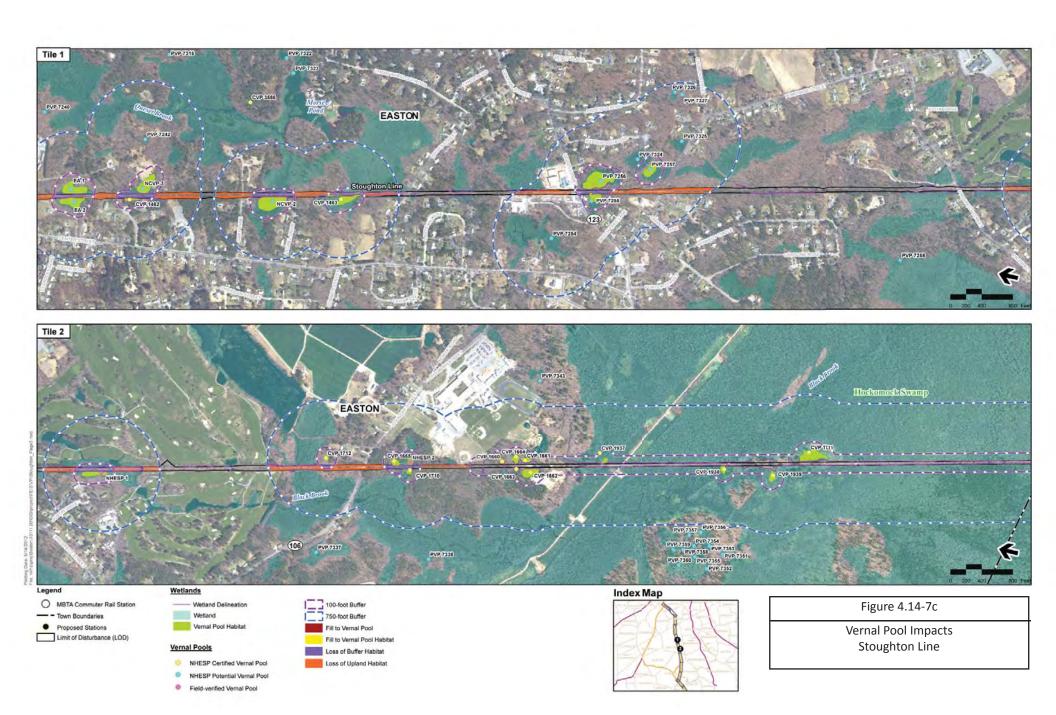


Vernal Pool Impacts Stoughton Line





Field-verified Vernal Pool



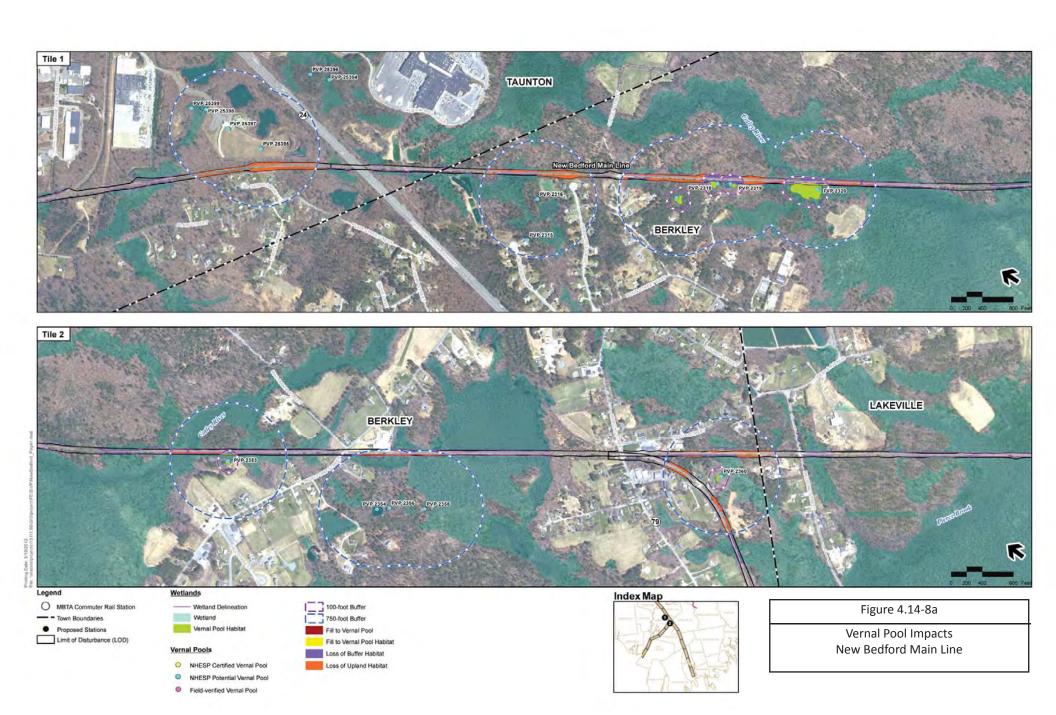


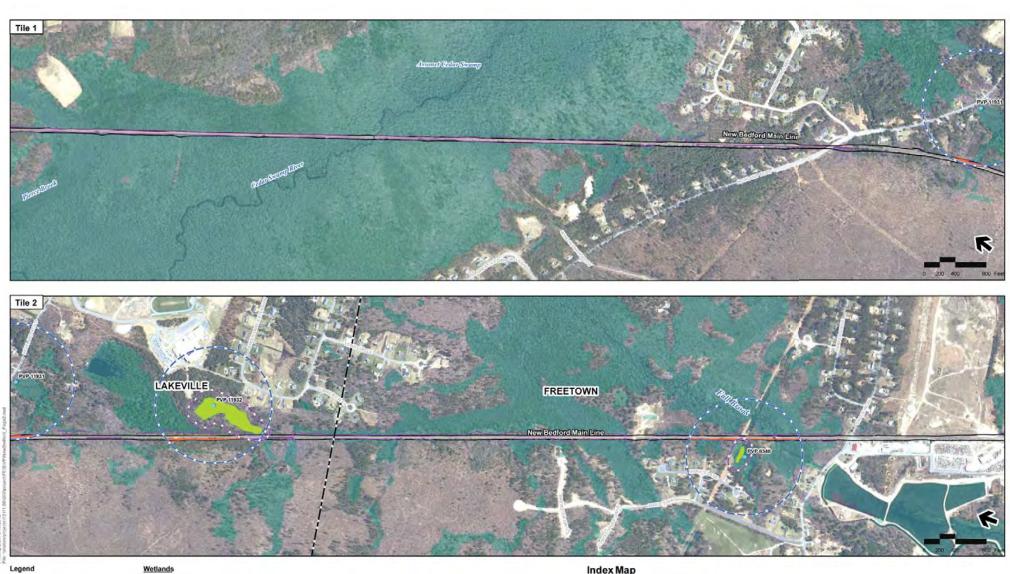


Field-verified Vernal Pool



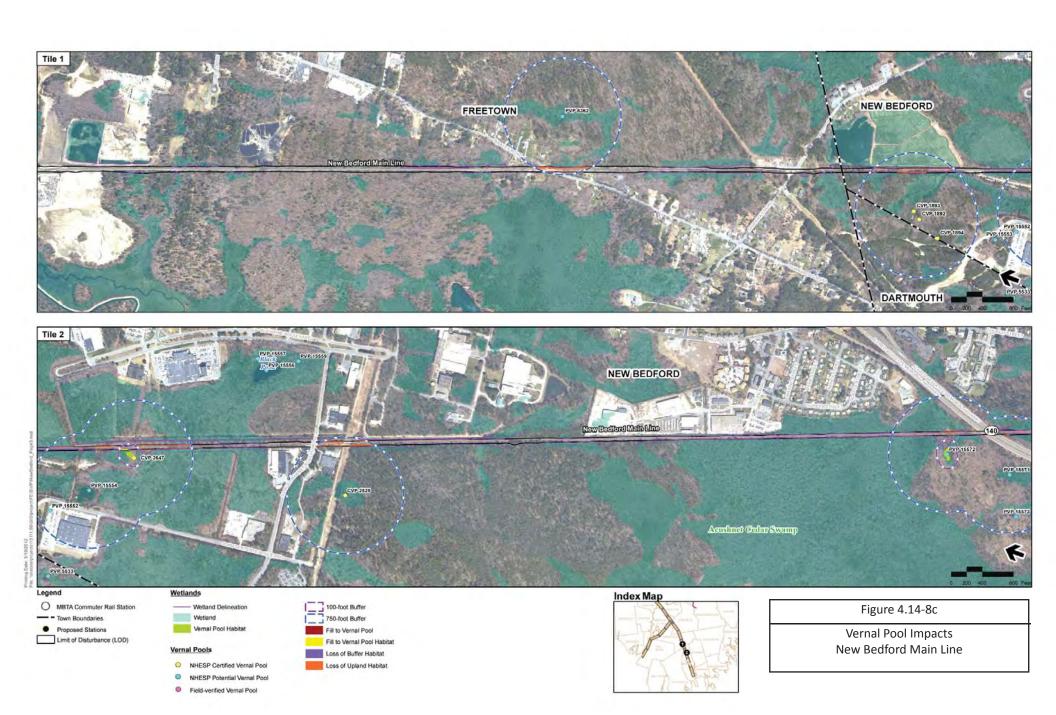
Index Map Wetlands MBTA Commuter Rail Station Wetland Delineation 100-foot Buffer Figure 4.14-7e Town Boundaries 750-foot Buffer Proposed Stations Vernal Pool Habitat Fill to Vernal Pool Vernal Pool Impacts Limit of Disturbance (LOD) Fill to Vernal Pool Habitat Stoughton Line/New Bedford Main Line Loss of Buffer Habitat O NHESP Certified Vernal Pool Loss of Upland Habitat NHESP Potential Vernal Pool Field-verified Vernal Pool







- Town Boundaries Proposed Stations Limit of Disturbance (LOD)







Legend

MBTA Commuter Rail Station - Town Boundaries

 Proposed Stations Limit of Disturbance (LOD)

Wetlands

- Wetland Delineation Wetland

100-foot Buffer

750-foot Buffer

Fill to Vernal Pool

Fill to Vernal Pool Habitat

Loss of Buffer Habitat Loss of Upland Habitat

Vernal Pool Habitat

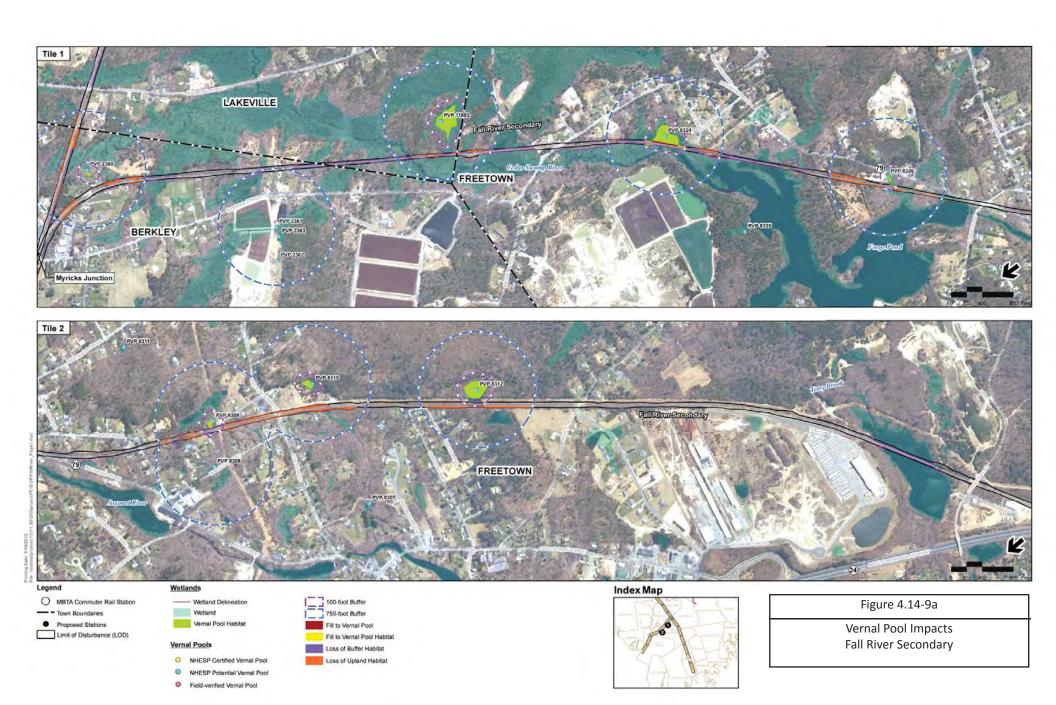
O NHESP Certified Vernal Pool

Field-verified Vernal Pool



Figure 4.14-8d

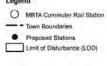
Vernal Pool Impacts New Bedford Main Line















Vernal Pool Impacts Fall River Secondary

Figure 4.14-9c





O MBTA Commuter Rail Station - Town Boundaries

 Proposed Rail Station Limit of Grading

Wetland Vernal Pool Habitat

Vernal Pools

NHESP Certified Vernal Pool

NHESP Potential Vernal Pool

Field-Identified Potential Vernal Pool

100-foot Buffer

750-foot Buffer

Loss of Buffer Habitat

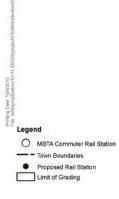
Loss of Upland Habitat



Figure 4.14-10a

Whittenton Alternative Raynham Junction to Weir Junction

Vernal Pool Impacts



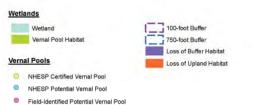




Figure 4.14-10b

Whittenton Alternative
Raynham Junction to Weir Junction

Vernal Pool Impacts





Town Boundaries

 Proposed Stations Stoughton Line

CAPS Index of Ecological Integrity
Top 50% of the Landscape

- Wetland Delineation

Vernal Pools

Certified Vernal Pool
Potential Vernal Pool

Constrained by Physical Characteristics

Recommended to meet MA
River and Stream Crossing Standards

Between-tie Crossing

Tunnel Crossing

Wildlife Crossing,
Type to be Determined

Hydraulic Analysis, Replace in kind, or Eliminate

Recommended to be Daylighted

Recommended to meet MA
River and Stream Crossing Standards



Figure 4.14-11a

Fish and Wildlife Crossings Stoughton Line





MBTA Commuter Rail Station

MBTA Commuter Rail

- Town Boundaries

 Proposed Stations Stoughton Line

CAPS Index of Ecological Integrity
Top 50% of the Landscape

Wetland Delineation

Vernal Pools

Certified Vernal Pool
Potential Vernal Pool

▲ Constrained by Physical Characteristics

Recommended to meet MA
River and Stream Crossing Standards

Between-tie Crossing

Tunnel Crossing

Wildlife Crossing,
Type to be Determined

Hydraulic Analysis, Replace in kind, or Eliminate

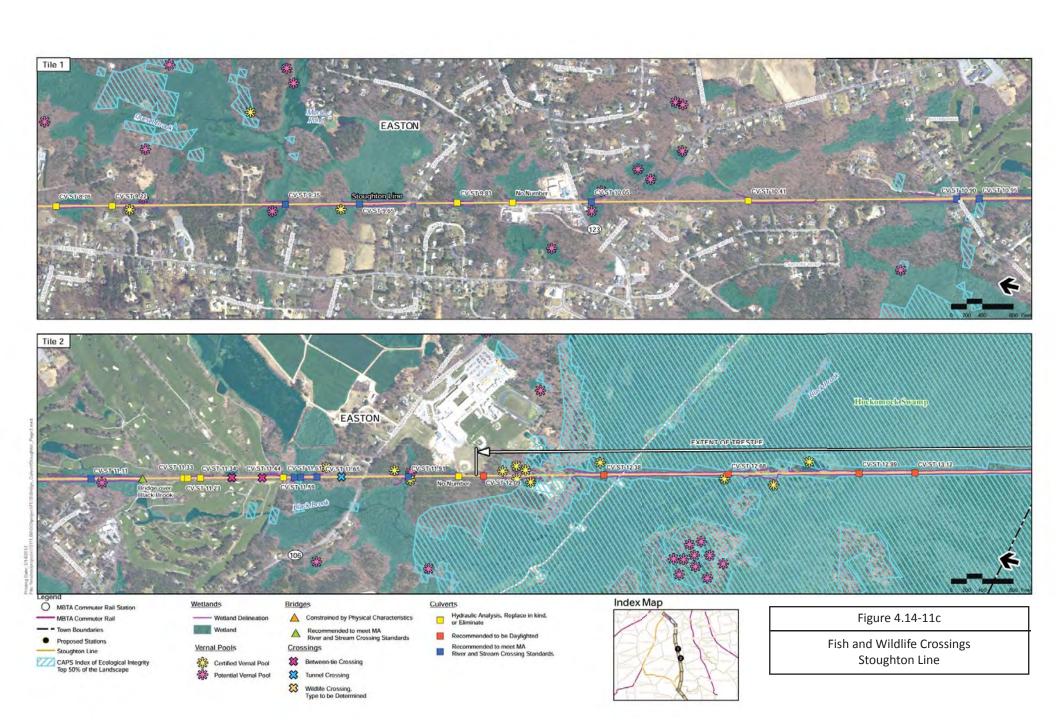
Recommended to be Daylighted

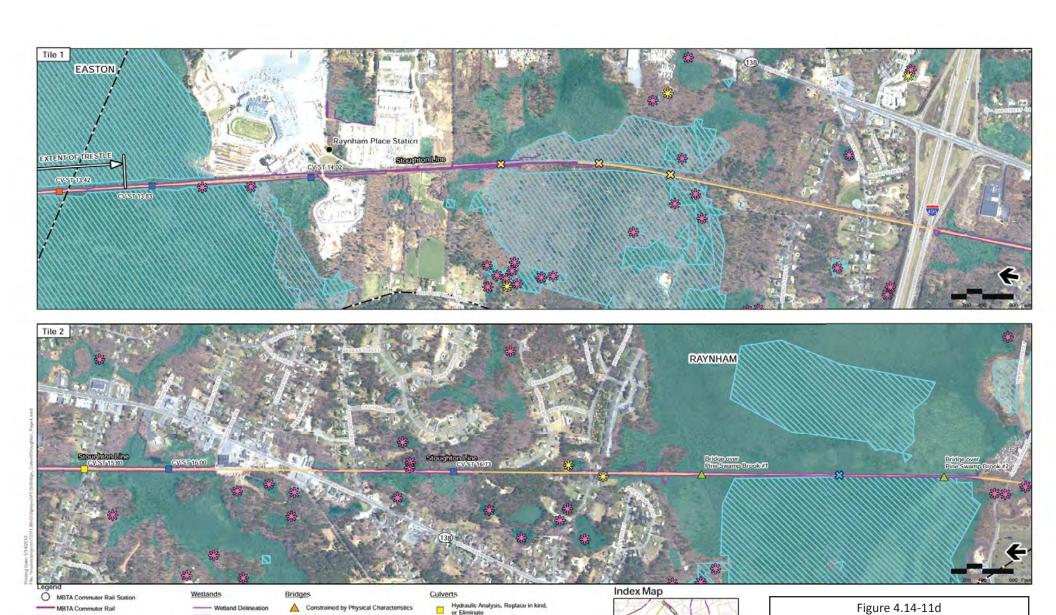
Recommended to meet MA
River and Stream Crossing Standards



Figure 4.14-11b

Fish and Wildlife Crossings Stoughton Line





Recommended to be Daylighted

Recommended to meet MA River and Stream Crossing Standards

Fish and Wildlife Crossings

Stoughton Line

▲ Constrained by Physical Characteristics

Crossings

 Between-tie Crossing Tunnel Crossing Wildlife Crossing.
Type to be Determined

Vernal Pools

Certified Vernal Pool
Potential Vernal Pool

Recommended to meet MA River and Stream Crossing Standards

---- MBTA Commuter Rail

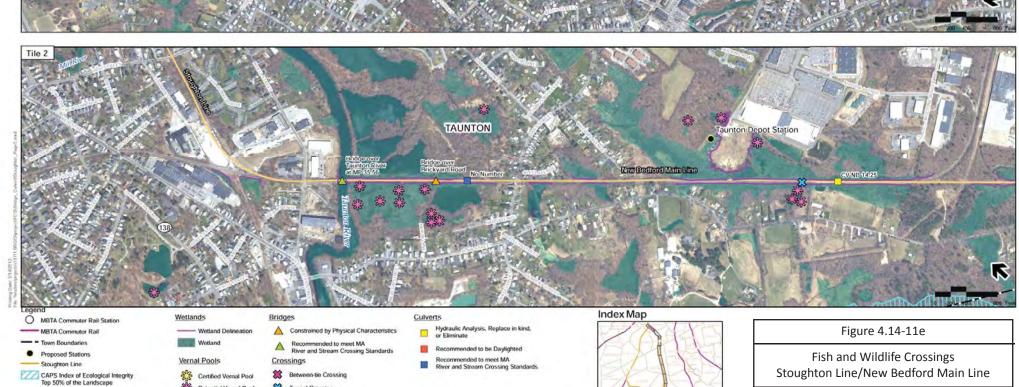
Proposed Stations

Stoughton Line

CAPS Index of Ecological Integrity
Top 50% of the Landscape

- Town Boundaries



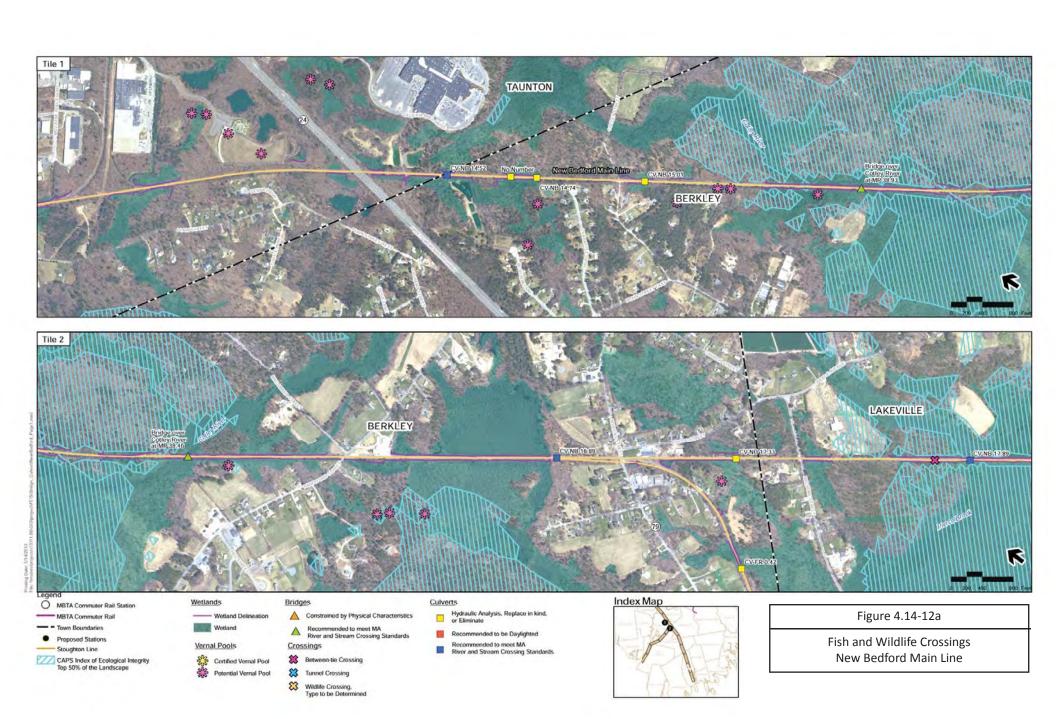


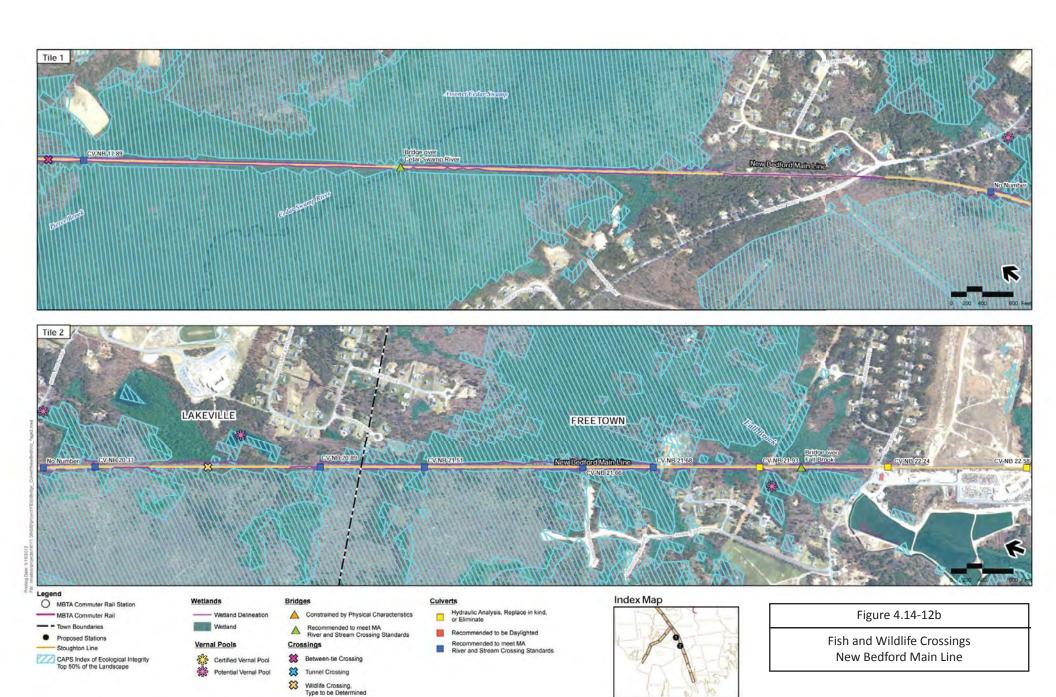
Certified Vernal Pool
Potential Vernal Pool

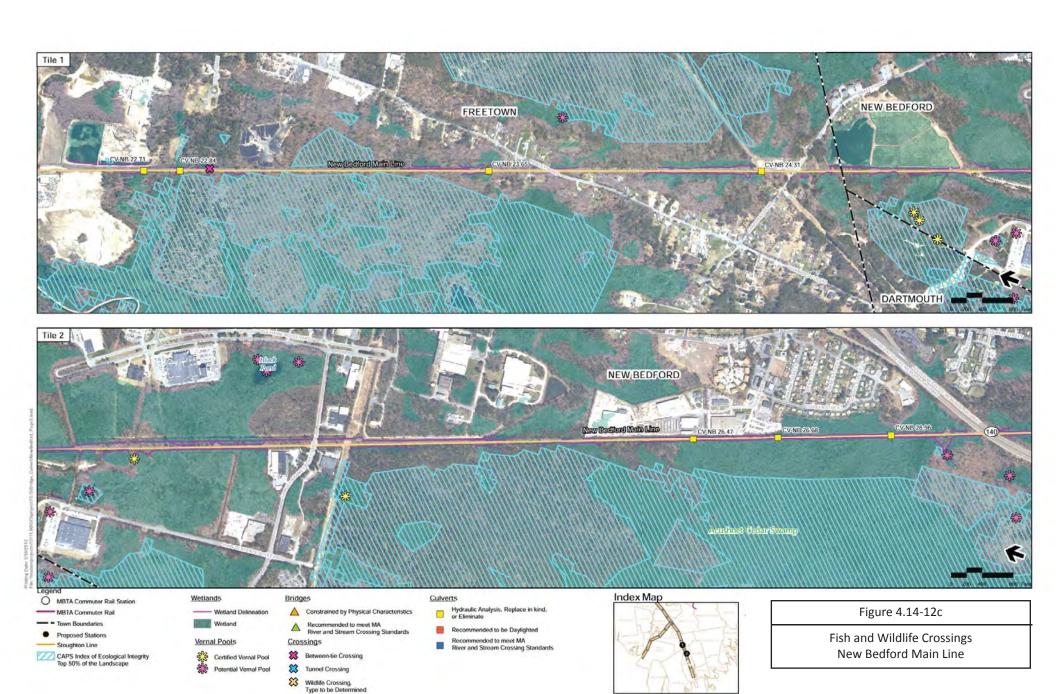
Tunnel Crossing

Wildlife Crossing.
Type to be Determined













O MBTA Commuter Rail Station

MBTA Commuter Rail

- Town Boundaries Proposed Stations

Stoughton Line

CAPS Index of Ecological Integrity Top 50% of the Landscape

Wetlands

Vernal Pools

Certified Vernal Pool
Potential Vernal Pool

Bridges

A Constrained by Physical Characteristics

Recommended to meet MA River and Stream Crossing Standards Crossings

28 Between-tie Crossing

XX Tunnel Crossing

Wildlife Crossing.
Type to be Determined

Culverts

Hydraulic Analysis. Replace in kind, or Eliminate

Recommended to be Daylighted

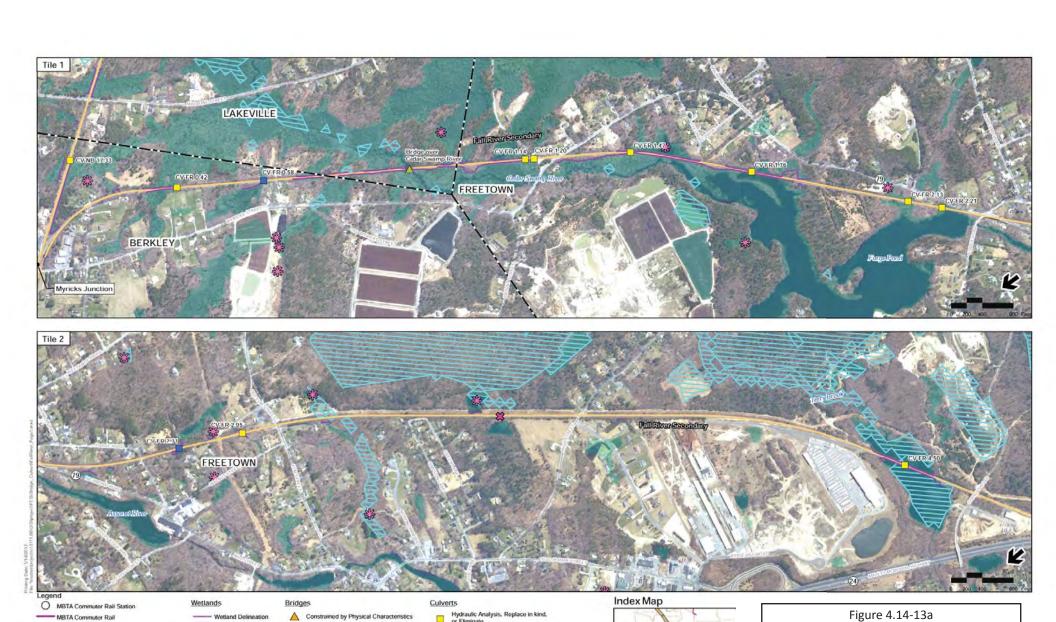
Recommended to meet MA River and Stream Crossing Standards

Index Map



Figure 4.14-12d

Fish and Wildlife Crossings New Bedford Main Line



Wetland Delineation

Wetland

Wetland

Recommended to meet MA
River and Stream Crossing Standards

Vernal Pools

Constrained by Physical Characteristics

Recommended to meet MA
River and Stream Crossing Standards

Recommended to meet MA
River and Stream Crossing Standards

Recommended to meet MA
River and Stream Crossing Standards

Recommended to meet MA
River and Stream Crossing Standards

Recommended to meet MA
River and Stream Crossing Standards

Recommended to meet MA
River and Stream Crossing Standards

Fish and Wildlife Crossings

Fall River Secondary

Wildlife Crossing, Type to be Determined

- Town Boundaries

Proposed Stations

Stoughton Line

CAPS Index of Ecological Integrity
Top 50% of the Landscape





MBTA Commuter Rail

- Town Boundaries Proposed Stations

Stoughton Line

CAPS Index of Ecological Integrity
Top 50% of the Landscape

Wetland Delineation

Vernal Pools

Certified Vernal Pool
Potential Vernal Pool

▲ Constrained by Physical Characteristics

Recommended to meet MA River and Stream Crossing Standards Crossings

2 Between-tie Crossing

Tunnel Crossing

Wildlife Crossing, Type to be Determined

Hydraulic Analysis, Replace in kind, or Eliminate

Recommended to be Daylighted

Recommended to meet MA River and Stream Crossing Standards

Figure 4.14-13b

Fish and Wildlife Crossings **Fall River Secondary**

Hydraulic Analysis, Replace in kind, or Eliminate

Recommended to meet MA River and Stream Crossing Standards

Recommended to be Daylighted









Fish and Wildlife Crossings Fall River Secondary

Figure 4.14-13c





---- MBTA Commuter Rail - Town Boundaries Proposed Stations Stoughton Line

CAPS Index of Ecological Integrity Top 50% of the Landscape

Constrained by Physical Characteristics Wetland Delineation Recommended to meet MA
River and Stream Crossing Standards

Vernal Pools Crossings

> ** Between-tie Crossing Certified Vernal Pool Potential Vernal Pool XX Tunnel Crossing

> > Wildlife Crossing, Type to be Determined

Hydraulic Analysis, Replace in kind, or Eliminate

Recommended to be Daylighted Recommended to meet MA River and Stream Crossing Standards

Figure 4.14-14a

Whittenton Alternative Raynham Junction to Weir Junction

Fish and Wildlife Crossings







Figure 4.14-14b

Whittenton Alternative
Raynham Junction to Weir Junction
Fish and Wildlife Crossings

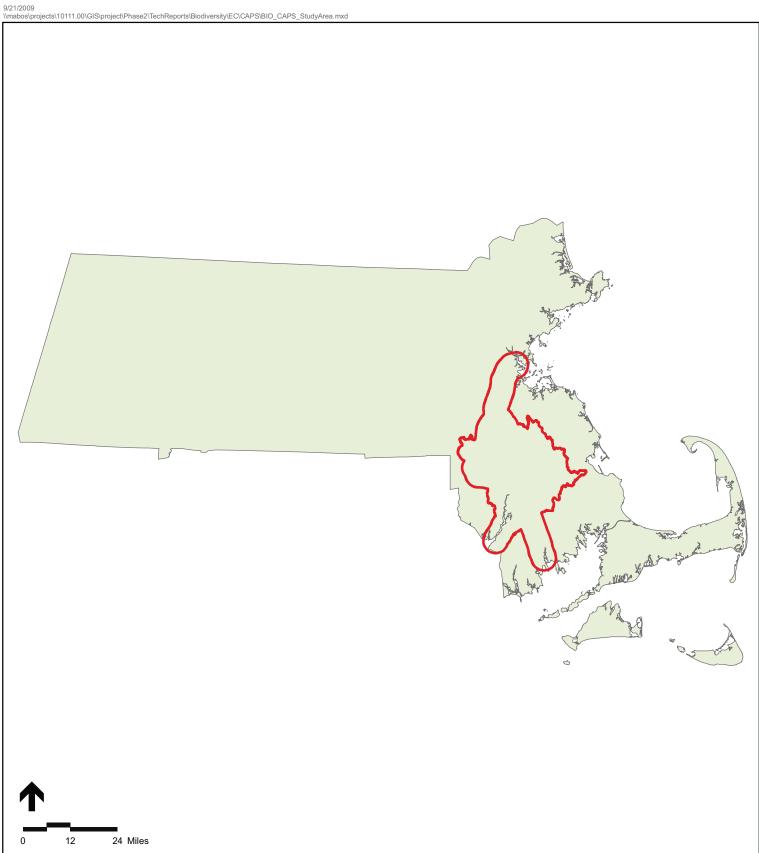
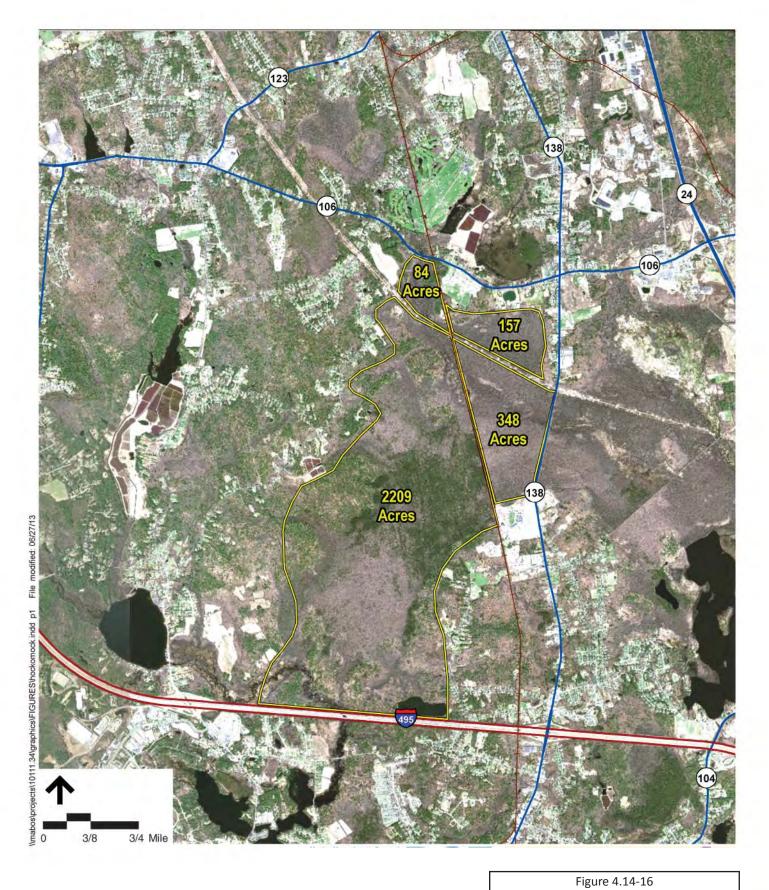






Figure 4.14-15

Study Area for the South Coast Rail Analysis



Hockomock Swamp Areas

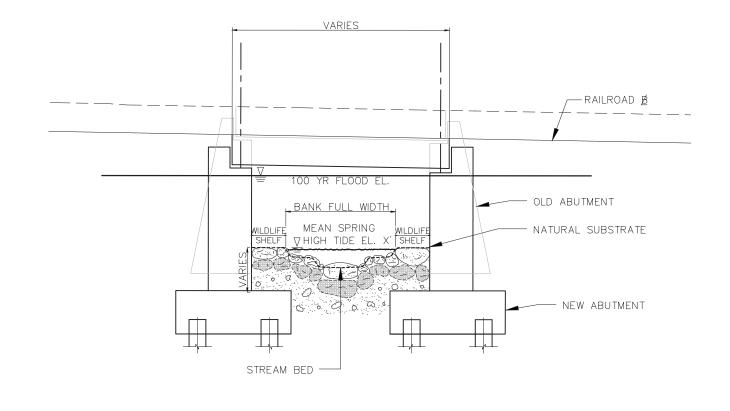


Figure 4.14-21a

Typical Single-span Bridge Cross Section

Figure 4.14-21b

Typical Two-span Bridge Cross Section



Legend

Proposed Alternative

Limit of Permanent Impact for Proposed Rail

Limit of Work for Proposed Station

Forested Upland
Upland Scrub Shrub

Upland Scrub Shrub
Wooded Swamp Deciduous



NHESP Certified Vernal Pools



NHESP Potential Vernal Pools



SCR Identified Vernal Pools (Field Verified)

Vernal Pool ID

Note: NHESP Potential Vernal Pools: NOT equivalent to Certified Vernal Pools

Figure 4.14-26

Taunton Depot Station
Biodiversity Impacts





Proposed Alternative

Limit of Permanent Impact for Proposed Rail

Limit of Work for Proposed Station

Forested Upland
Upland Scrub Shrub

Wooded Swamp Deciduous

NHESP Certified Vernal Pools



NHESP Potential Vernal Pools



SCR Identified Vernal Pools (Field Verified)

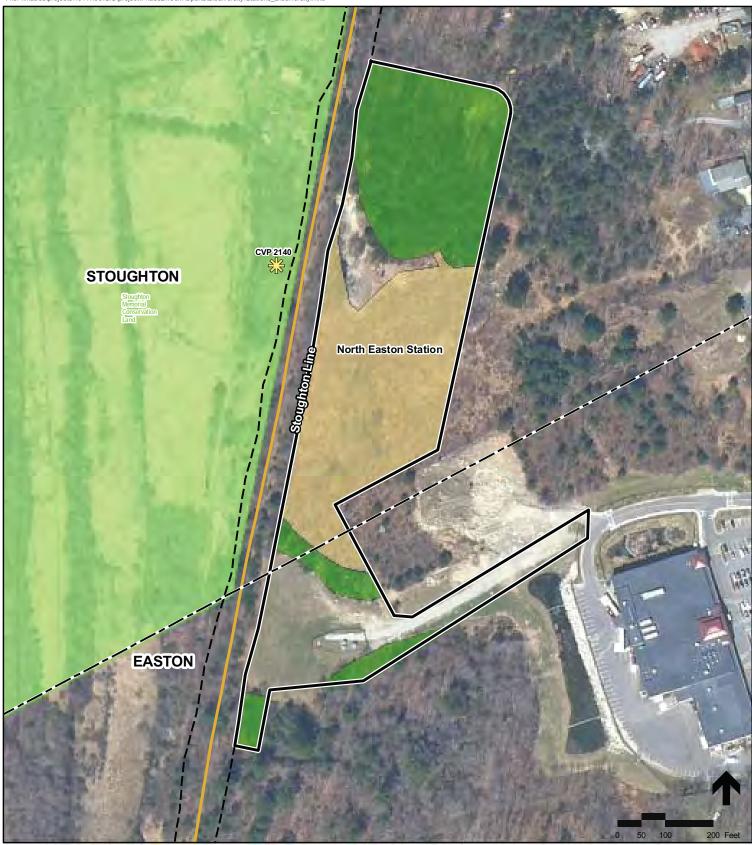
Vernal Pool ID

Note: NHESP Potential Vernal Pools: NOT equivalent to Certified Vernal Pools

Figure 4.14-27

Freetown Station

Biodiversity Impacts





Proposed Alternative

Limit of Permanent Impact for Proposed Rail

Limit of Work for Proposed Station

Forested Upland
Upland Scrub Shrub

Upland Scrub Shrub Wooded Swamp Deciduous



NHESP Certified Vernal Pools



NHESP Potential Vernal Pools



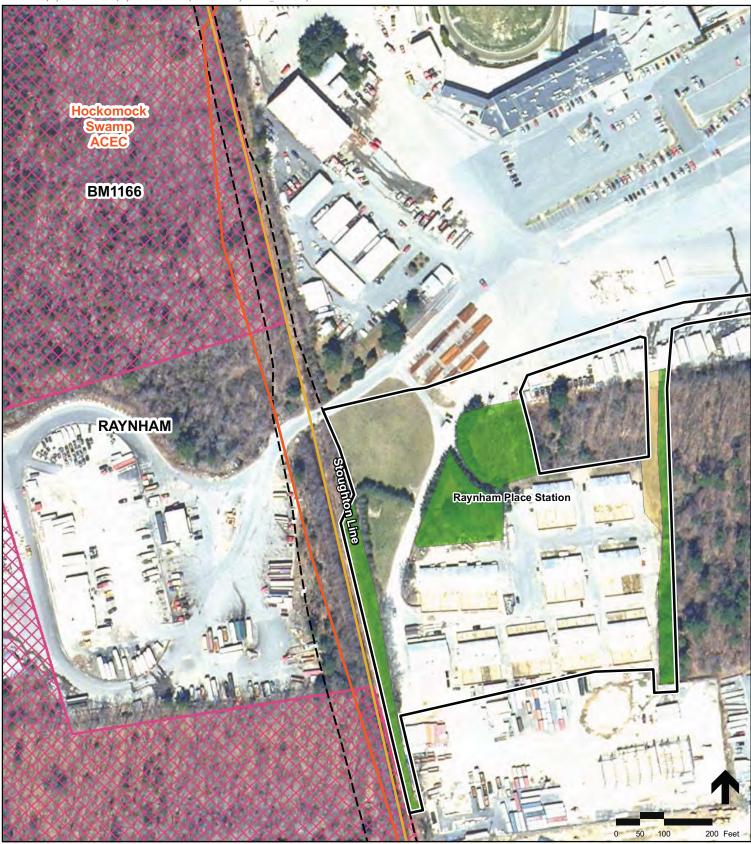
SCR Identified Vernal Pools (Field Verified)

Vernal Pool ID

Note: NHESP Potential Vernal Pools: NOT equivalent to Certified Vernal Pools

Figure 4.14-28

North Easton Station
Biodiversity Impacts





Proposed Alternative

Limit of Permanent Impact for Proposed Rail

Limit of Work for Proposed Station

Forested Upland

Upland Scrub Shrub

Wooded Swamp Deciduous

NHESP Certified Vernal Pools



NHESP Potential Vernal Pools



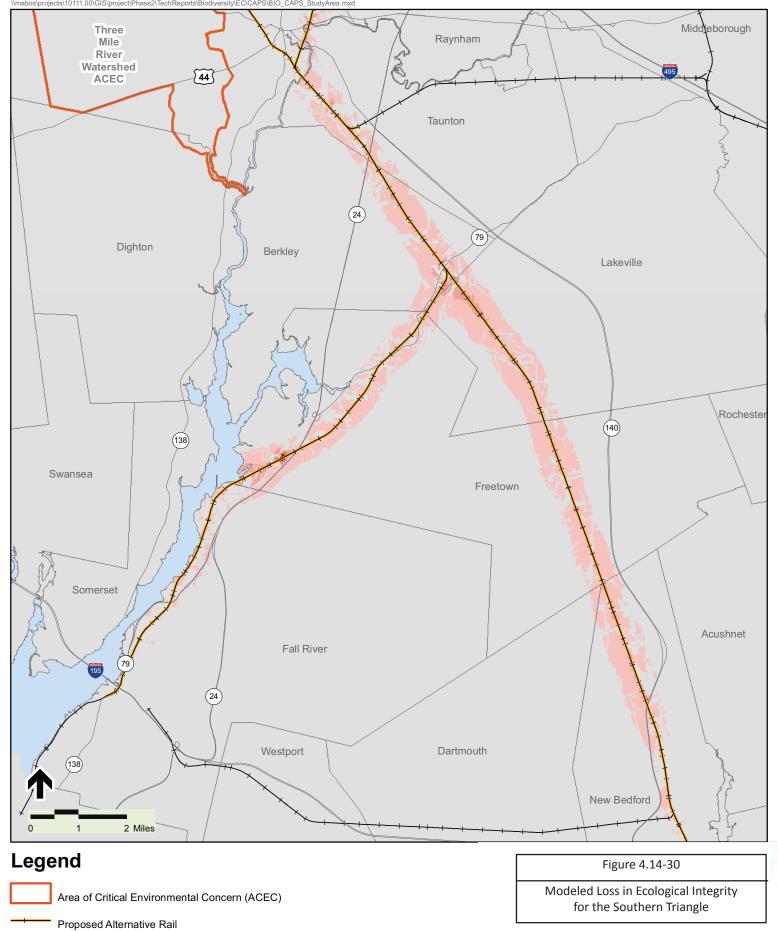
SCR Identified Vernal Pools (Field Verified)

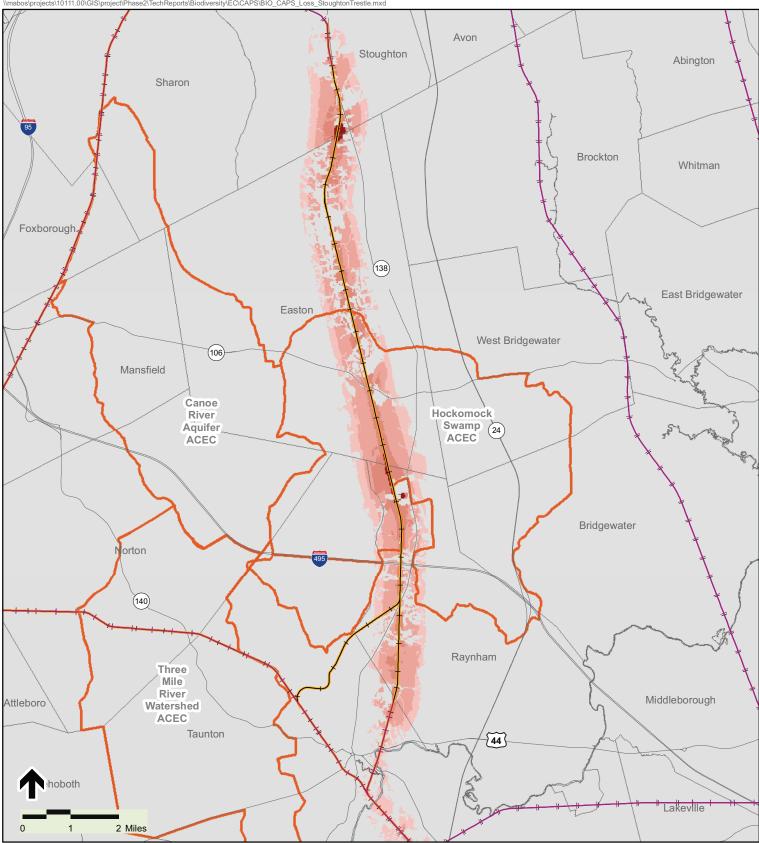
Vernal Pool ID

Note: NHESP Potential Vernal Pools: NOT equivalent to Certified Vernal Pools

Figure 4.14-29 Raynham Place Station Biodiversity Impacts

Area of Critical Environmental Concern (ACEC)





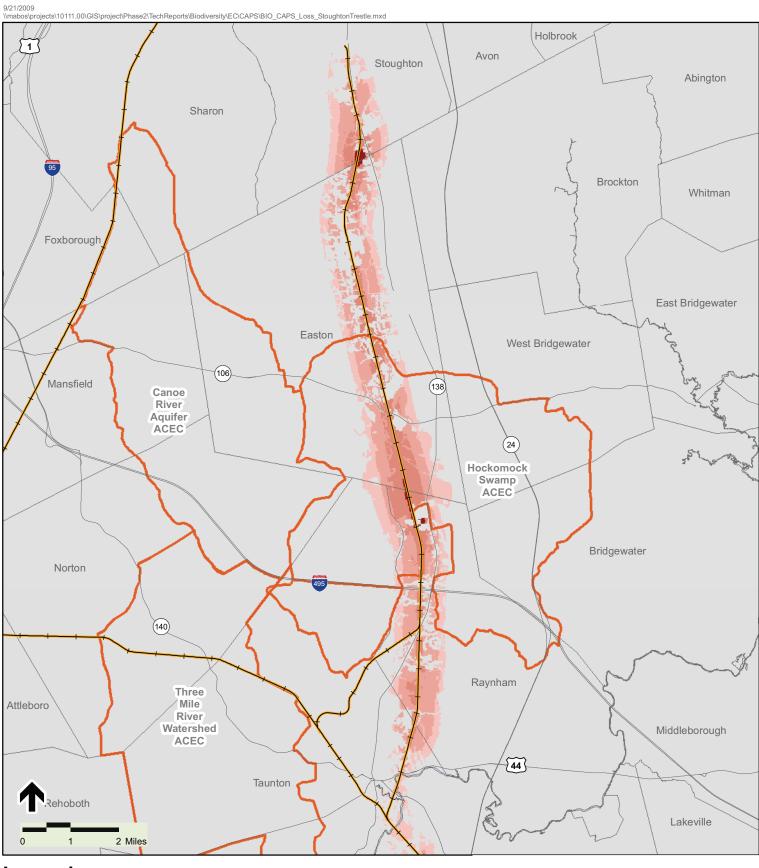
Legend

Area of Critical Environmental Concern (ACEC)

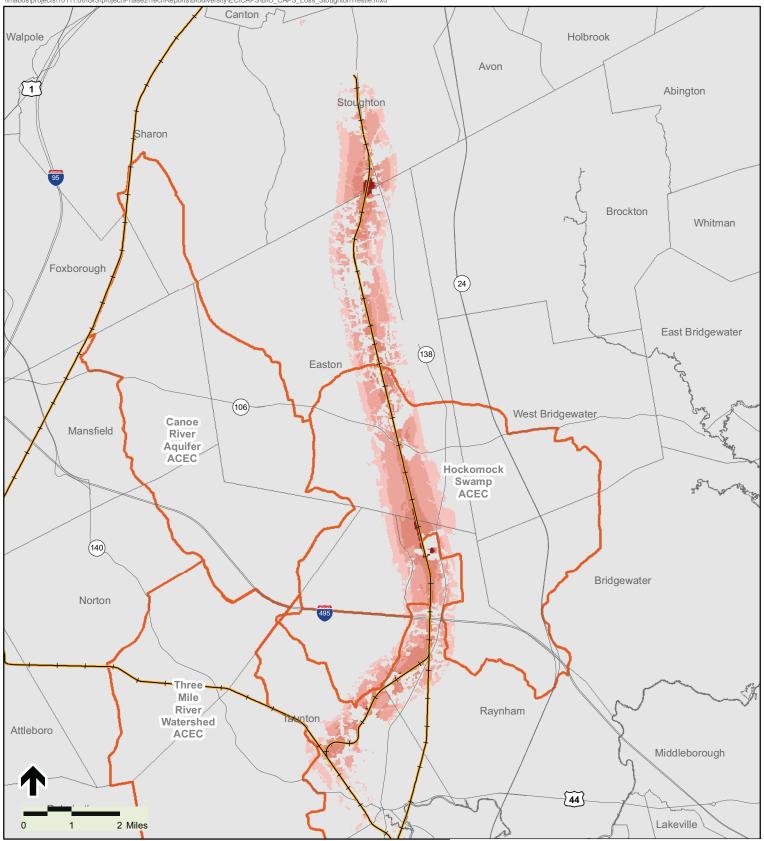
Proposed Alternative Rail

Figure 4.14-31

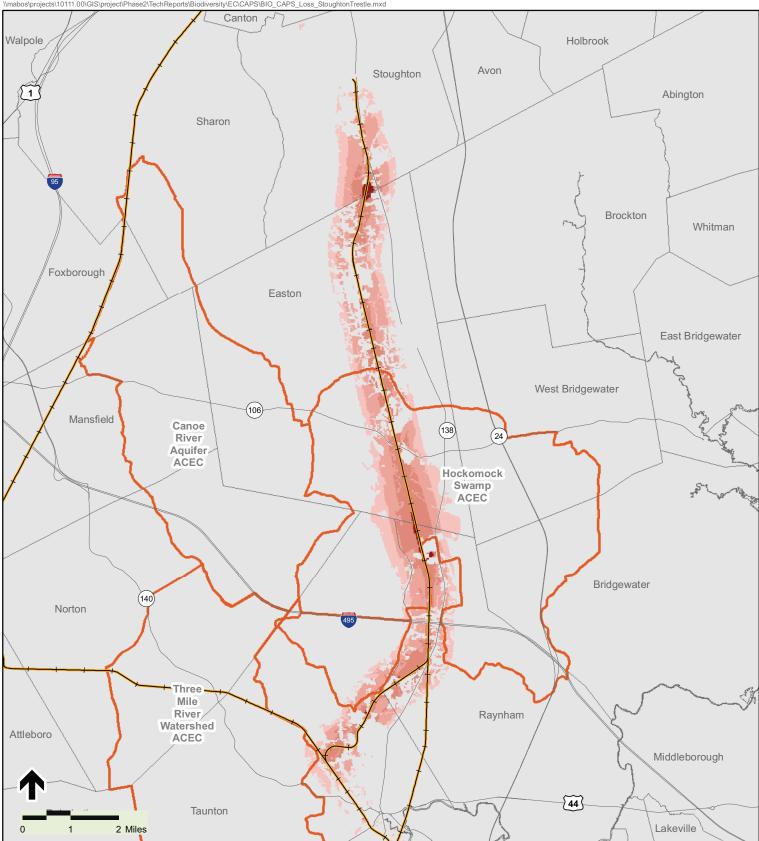
Modeled Loss in Ecological Integrity for the Stoughton Alternative (with Trestle)











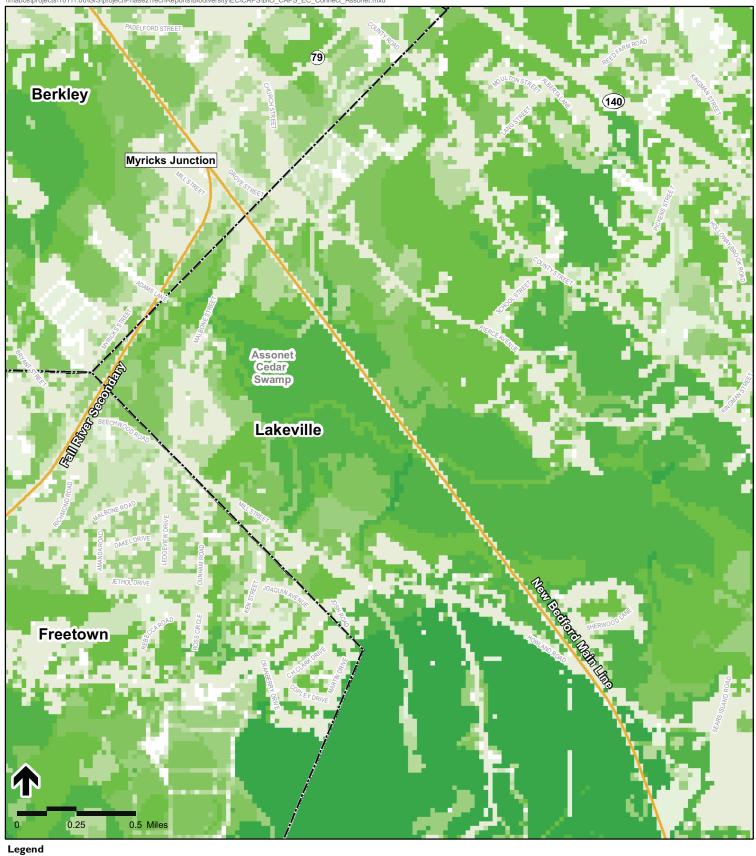


Area of Critical Environmental Concern (ACEC)

Proposed Alternative Rail

Figure 4.14-34

Modeled Loss in Ecological Integrity for the Whittenton Alternative (without trestle)



Connectedness

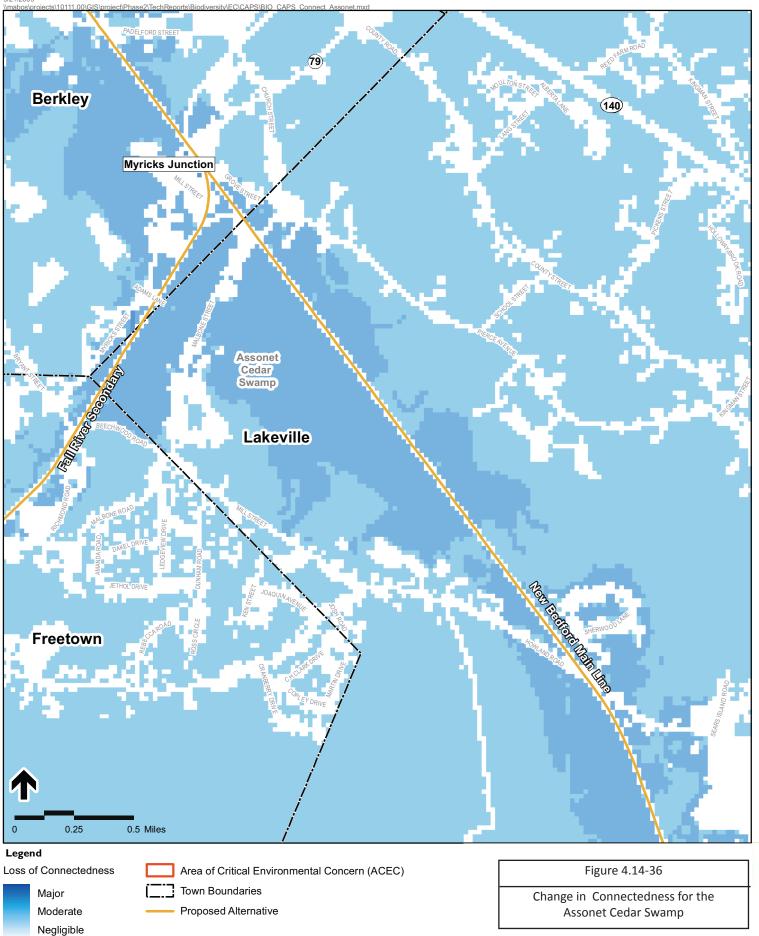
Connectedness





Figure 4.14-35

Existing Connectedness for the Assonet Cedar Swamp





Connectedness

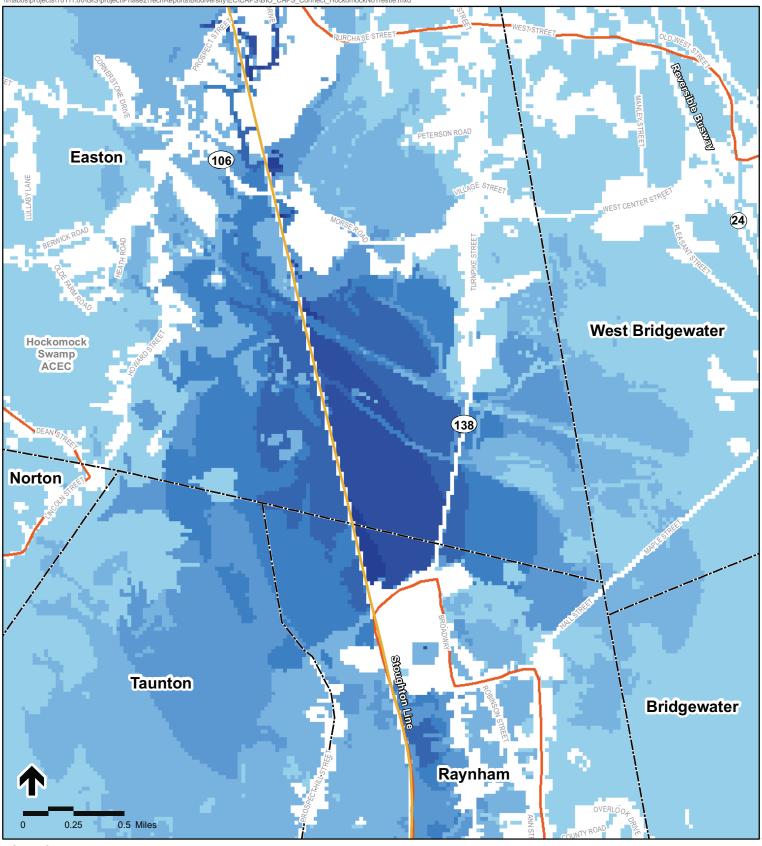
High





Figure 4.14-37

Existing Connectedness for the Hockomock Swamp

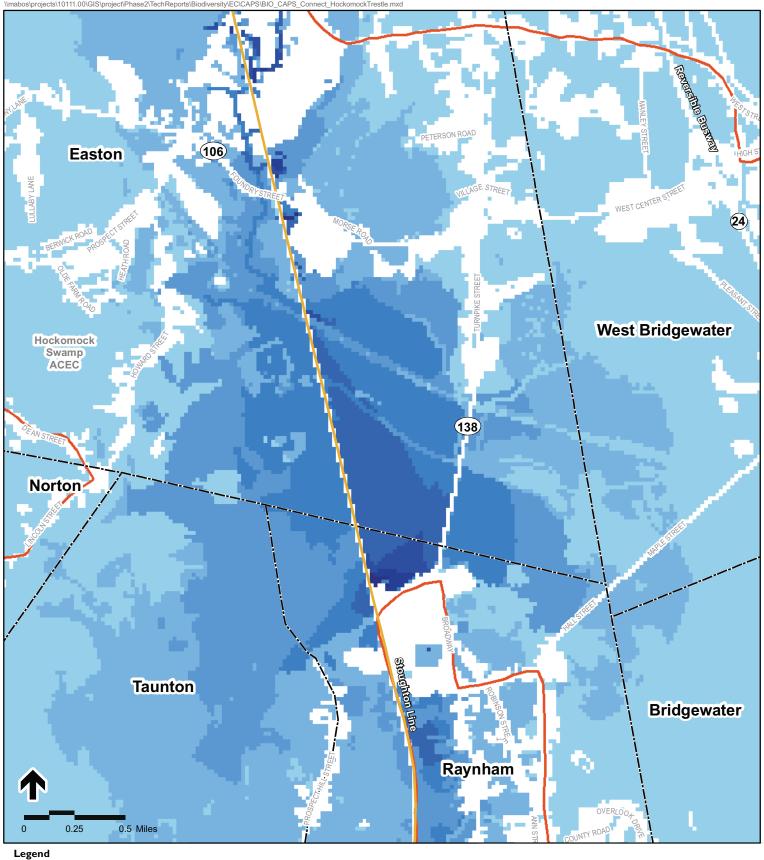




Negligible

Change in Connectedness for the Hockomock Swamp (without trestle)

Figure 4.14-38





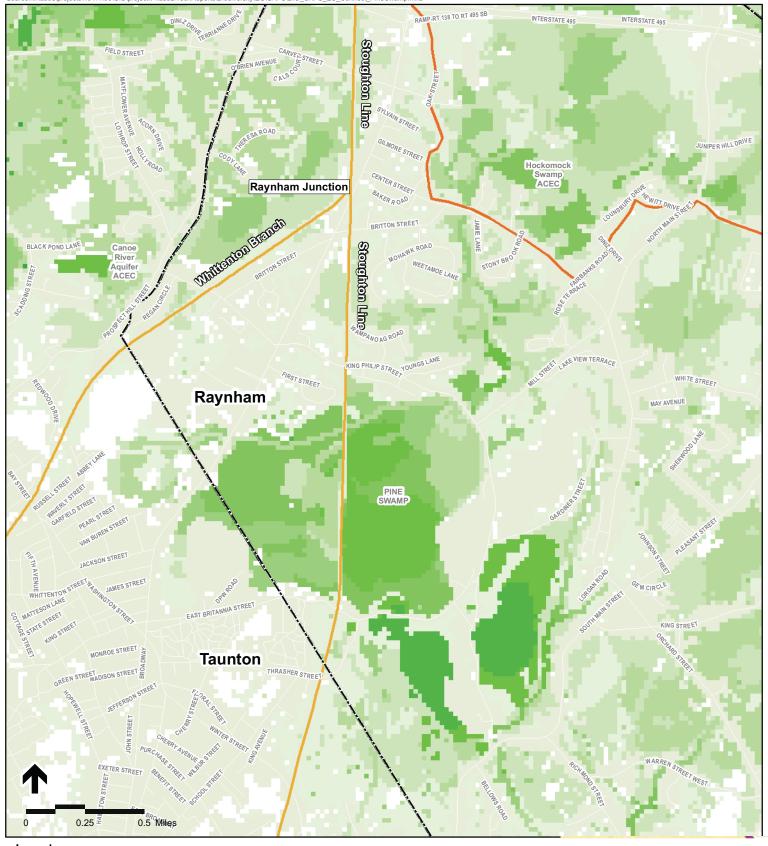




Town Boundaries Proposed Alternative

Figure 4.14-39

Change in Connectedness for the Hockomock Swamp (with trestle)



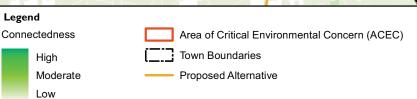
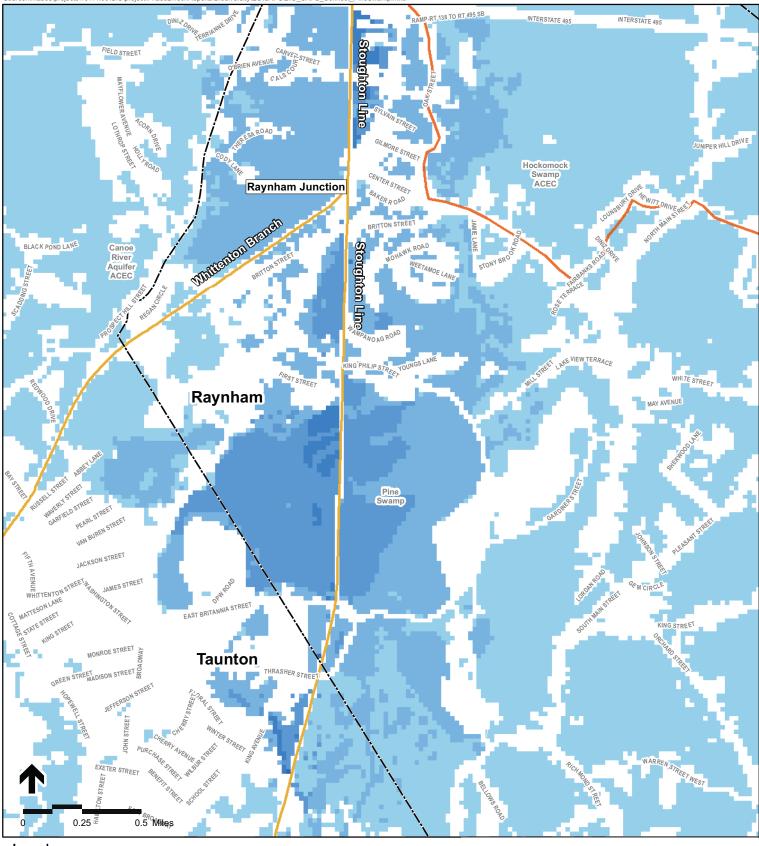
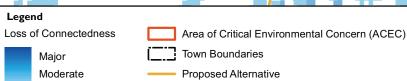


Figure 4.14-40 Existing Connectedness for the Pine Swamp



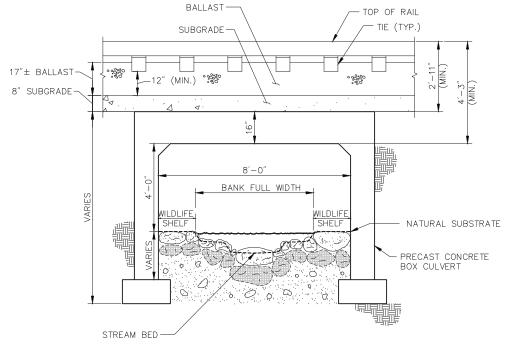


Negligible

Figure 4.14-41 Change in Connectedness for the Pine Swamp

Figure 4.14-42

Culvert Mitigation Measure Decision Tree

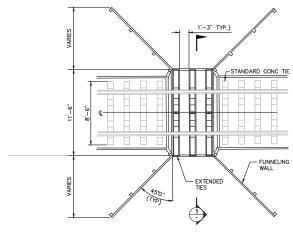


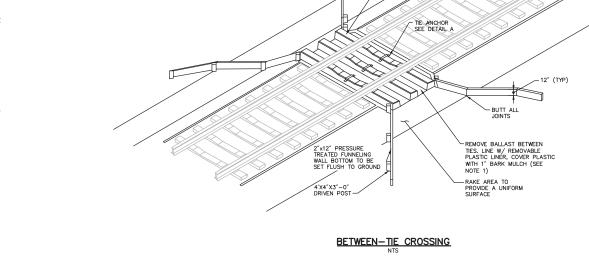
8'-0" WIDE PRECAST CONCRETE BOX CULVERT

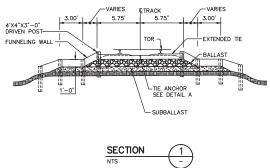
SCALE: 1/4" = 1'-0"

Figure 4.14-43

Typical Culvert Cross Section







BETWEEN-TIE CROSSING PLAN NTS



EXTEND TIES TO LIMIT OF BALLAST



1. CONTRACTOR TO REMOVE BALLAST BETWEEN TIES AND LINE AREA WITH 40 MIL HDPE FORMED TIGHTLY BETWEEN TIES. CONNECT TO CONC TIES WITH CONC ANCHORS

Figure 4.14-44

Between-tie Crossing